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A Carcinogenicity Bioassay of Isobutyl 2-Cyanoacrylate (IBC) in Fischer-344 Rats--One-Year Interim Sacrifice Report

> (Volume 2 of 2) (Part 2)

Larry D. Brown, DVM, MAJ VC
Catherine D. Smith, DVM, MAJ VC
Lance O. Lollini, DVM, LTC VC
and
Don W. Korte, Jr, PhD, MAJ, MSC



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DIVISION OF COMPARATIVE MEDICINE AND TOXICOLOGY

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In conducting the research described in this report, the investigation adhered to the "Guide for the Care and Use of Laboratory Animals," as promulgated by the Committee on Revision of the Guide for Laboratory Animal Facilities and Care, Institute of Laboratory Animal Resources, National Research Council.

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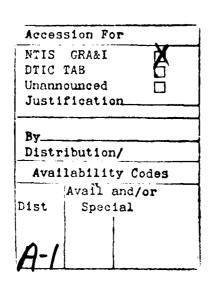
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a variety of transitory clinical signs sporadically throughout the year in addition to the more permanent sequelae of the surgical procedure (xyphoid protuberance, corneal opacity). These signs were observed in all dose groups and could not be attributed to compound administration. The weight gain of the two IBC treatment groups was comparable to that recorded for the control group. During the first year, 17 animals died or were sacrificed; three were unscheduled deaths and 14 were unscheduled sacrifices. At the end of the first year 60 animals, 10 males and 10 females from each of the three groups, were selected randomly for a scheduled interim sacrifice. Three hundred and five animals remained on study at the start of the second year.

A total of 77 animals (17 unscheduled and 60 scheduled) were evaluated at necropsy during the first year. Fourteen of 14 unscheduled animals and 39 of 40 scheduled animals that received the IBC had fibrotic adhesions between the liver and the omentum, peritoneal membrane, diaphragm, stomach, skin, and/or intestine. These lesions were characterized histologically as foreign body granulomatous reactions. Nine tumors were observed in three unscheduled (total four tumors) and five scheduled animals. The unscheduled animal tumors included an atriocava epithelial mesothelioma (10 ul IBC male), a mononuclear cell leukemia of splenic origin (10 ul IBC female), and a pituitary adenoma and mononuclear cell leukemia (100 ul IBC female) The scheduled animal tumors included an endometrial stromal polyp (10 ul IBC female), testicular mesothelioma (10 ul IBC male), adrenal gland cortical adenoma (10 ul IBC male), and pituitary adenomas (control and 10 ul IBC males). These tumors were spontaneous lesions and were considered incidental to IBC treatment. All other gross or histopathological findings were also considered incidental to IBC treatment or were sequelae of the surgical procedure.

Results of this study indicate that IBC has no effect on survival, weight gain, or the clinic condition of rats during the first year following its implantation. The only gross or histopathological finding observed in the first year attributed to the IBC treatment was the presence of adhesions on and a granulomatous reaction of the liver and those adjacent organs that came in contact with the IBC. No tumors were observed during the first year that could be attributed to IBC treatment.





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Glossary of Tumor, Compound Related Findings and Frequently Observed Incidental Lesions for Isobutyl 2-Cyanoacrylate Carcinogenicity Assay - GLP Study 83009

RAT CHRONIC RENAL DISEASE

Rat chronic renal disease is prevalent in many strains of rat including the Fischer 344. The cause of the disease is unknown. It is a progressive disease in which the incidence and severity increase with age. Microscopic lesions may occur as early as three months, but severe lesions are rarely found in rats less than one year of age. Tubules, glomeruli, interstitium and small blood vessels are all involved.

Interstitial changes progress from small perivascular aggregates of lymphocytes in between the tubules to interstitial fibrosis and increased numbers of mononuclear leukocytes in later stages. Tubular changes start with dilation and filling of tubular lumens with hyaline material. Tubular epithelial cells eventually show degenerative changes such as vacuolation, accumulation of hyaline droplets and necrosis in severe cases. These cells may range from being flattened to being hyperplastic (during regenerative attempts) when they are large and pleomorphic. Tubular basement membranes frequently thicken and ultimately both cystic dilatation and tubular atrophy occur.

Glomerular changes usually become apparent by light microscopy a little later than tubulo-interstitial changes. Thickening of Bowman's capsular basement membranes, pericapsular fibrosis, increased numbers of cells in the glomerular tuft, mild thickening of capillary walls and glomerular mesangial matrix increase are early changes, which progress to glomerular sclerosis and/or atrophy with cystic dilatation of Bowman's space.

Hyalinization of the walls of small blood vessels and widespread mineralization of tubules, basement membranes, and necrotic epithelial cells are present in the severe stage of the disease.

Scoring Criteria: Rat Chronic Renal Disease

Score

l (trace) Occasional aggregates of lymphocytes are present or adjacent to small blood vessels primarily located in the corticomedullary junctions. Low numbers of lymphocytes may be present in the interstitium between tubules. An occasional tubule may contain a hyaline cast or be dilated.

Mineralization may be minimally present.

2 (mild) From a few to several tubules may be dilated and/or contain hyaline material. Tubular epithelium may have degenerative changes. Thickening may be present in the region of tubular and Bowman's capsular basement membranes. Minimal interstitial fibrosis may be present around Bowman's capsule and tubules. Glomeruli may be hypercellular and a rare atrophic glomerulus may be present. Increased numbers of lymphocytes may be present in the interstitium. The renal capsule is still smooth. Changes may involve up to one fourth of the area examined.

(moderate)

Numerous tubules may be dilated or contain hyaline material. Occasional tubules may be either cystic or atrophied. Tubular regeneration may be apparent. Interstitial fibrosis is present as is periglomerular and peritubular basement membrane thickening. Glomerular tufts may have thickening of capillary loops, increased mesangial matrix, increased cellularity and occasional areas of sclerosis. Occasional glomeruli may be completely sclerotic or atrophied with or without cystic dilatation of Bowman's space. Capsular surfaces can be mildly irregular and up to one half of the area examined may be involved.

Score

4 (marked) Tubular dilatation and hyaline casts are spread throughout the section. Renal tubular necrosis and widespread mineralization may be present. Interstitial fibrosis will be apparent throughout the cortex. Cystic tubules and Bowman's spaces will be numerous. Glomerular changes will be apparent and widespread. Capsular surfaces will be irregular. Hyalinization of small vessel walls may be apparent.

CARDIOMYOPATHY OF THE FISCHER F344 RAT

Cardiomyopathy is a common disease of aging F344 rats. Younger rats may have a mild to moderate focal myocarditis. As the rats age the disease progresses to myocardial degeneration characterized by vacuolation and atrophy of muscle fibers. This is followed by fibrosis and loss of myofiber. All portions of the heart are not uniformly affected.

Grading of Cardiomyopathy

Score

- 1 From one to five small (2 mm in diameter) foci (trace) of lymphocytic infiltrates between myocardial fibers or around vessels in the myocardium.
- From 6 to 10 foci of lymphocytic infiltration and/or minimal to mild vacuolar changes in cardiomyofibers. Fibrosis that includes less than one-quarter section.
- More than 10 foci of lymphocytic infiltration.

 (moderate) Moderate to severe vacuolation of cardiomyofibers. Minimal to mild myofiber atrophy. Minimal to mild fibrosis in not more than one half of section.
- Greater than one third of the section involved.

 (marked) Moderate to severe myofiber atrophy and fibrosis.

HEPATITIS

Hepatitis consists of random, multifocal, small aggregates of lymphocytes, PMN, mononuclear and macrophage within the hepatic parenchyma. Hepatocellular degeneration and loss may accompany this change. Minimal to severe 3 fociminimal.

BILE DUCT HYPERPLASIA

Aging F344 rats frequently have foci of increased numbers of bile ducts in portal areas. Early lymphocytic pericholangitis is seen. Later bile duct proliferation is apparent. Fibrosis may or may not ensue.

Scoring Bile Duct Hyperplasia

Score

- 1 1 to 3 portal areas have hyperplastic bile (trace) ducts.
- 2 4 to 9 portal areas have hyperplastic bile (mild) ducts.
- More than 9 portal areas have hyperplastic bile (moderate) ducts. Pericholangiolar fibrosis and minimal sclerosis are present.
- 4 Pericholangiolar fibrosis is from moderate to (marked) severe, with from mild to severe sclerosis in addition to hyperplasia.

NONNEOPLASTIC FOCI AND AREAS OF CELLULAR ALTERATIONS IN RAT LIVERS

Three distinctive types of cellular alteration called "foci" or "areas" may be present in rat livers. They are more common in older rats, but they can be seen in rats less than one year old. These lesions are named for the morphology of their cellular composition which may be clear cell, acidophilic (ground glass) and basophilic. These lesions are usually uniform in cell type, but they may occasionally contain mixtures of cell types.

A lesion smaller than or equal to the size of a lobule is called a <u>focus</u>. A lesion larger than a lobule is called an <u>area</u>. The architectured pattern of the lesion varies little from the normal. The cellular appearance and staining reaction within the lesion is distinctly different from the adjacent normal cells. Hepatic cords of the lesion merge imperceptibly with those of the surrounding tissue without compressing them.

Foci and areas of cellular alteration can occur singly or in multiples, and the types can occur singly or in any combination. Their distribution throughout the liver is not uniform, and they may coexist with any other possible type of hepatic lesion.

Clear Cell Focus (area)

Appears as an area of clear pale cells sharply delineated from surrounding liver tissue. The cells have an empty zone around the nucleus which contains glycogen. Cells may be enlarged or of normal cell size.

Acidophilic Cell Focus (area)

Appears as an acidophilic staining area and the cellular cytoplasm has the appearance of ground glass. There is usually cellular enlargement with enlarged nuclei and prominent nucleoli. Inclusions may be present in the cytoplasm. The cords may be slightly irregular.

Basophilic Cell Focus (area)

Appears as an area of basophilic staining cells which are smaller than normal. The plates may be tortuous due to increased numbers of cells.

Mixed Cell Focus (area)

The mixed cell focus lesion may contain mixtures of any of the three types described previously.

All types of foci and areas will be considered equal for scoring purposes. An acidophilic focus and a basophilic focus would be counted as two foci.

Score

1 One focus. (trace)

Two to four foci - or - one area alone or in (mild) combination with from one to four foci.

Five to eight foci - or - two to three areas (moderate) alone or two areas in combination with from one to four foci.

Eight or more foci - or - four or more areas alone or three areas in combination with from one to four foci.

CHARACTERIZATION OF THE LESION PRODUCED LOCALLY BY BUCRYLATE®

The Bucrylate® is surrounded by a capsule of fibrous connective tissue. Inflammatory responses may or may not be present; however, when present, inflammation is characterized by macrophages and multinucleated giant cells adjacent to the Bucrylate®. Some small regions of the hepatic capsular surface are surrounded and sequestered by fibrous tissue. The hepatic tissue in these areas is usually atrophied and only a few islands of hepatocytes or an occasional bile duct remains.

Where the liver is adhered to adjacent structures, such as diaphragm, abdominal wall or intestine, the Bucrylate® is sequestered by fibrous connective tissue. The adjacent structures are joined by this fibrous tissue.

This lesion will be reported only as present (+) or absent (-).

MINERALIZATION OF PULMONARY ARTERIES AND AORTA

Focal, dense mineral deposits are frequently observed in the larger pulmonary arteries of F344 and other strains of rats. They are located beneath the endothelium in the vessel wall. Their etiology is unknown and they are not considered clinically important.

Scoring will be as follows:

Score

- A single small focus of mineral which produces (trace) minimal distortion of the vessel wall.
- Two to three small foci which produce minimal (mild) distortion to the vessel wall.
- Four or more small foci which distort the (moderate) vessel wall minimally or one larger focus which causes moderate distortion of the vessel wall.
- 4 More than one large focus which causes moderate (marked) distortion of the vessel wall.

TUMORS

Generally tumors will be reported as being present in a tissue. Severity is not indicated.

ATRIOCAVAL EPITHELIAL MESOTHELIOMA

Atriocaval epithelial mesothelioma is an infiltrative tumor of the myocardium. It is composed of glandular acini and anastomosing tubules lined primarily by cuboidal epithelial cells. The neoplastic structures may extend to the endocardial surface and are frequently filled with blood, blood clots, hemoglobin crystals and degenerating RBC's. The cells contain a modest amount of eosinophilic cytoplasm, round to oval nuclei with prominent nucleoli, and fine chromatin. The neoplastic cells may form clumps or sheets in some areas. Mitotic figures may be present in moderate numbers.

LARGE GRANULAR LYMPHOCYTE LEUKEMIA (MONONUCLEAR CELL LEUKEMIA)

Large granular lymphocyte leukemia is usually seen in peripheral blood late in the course of disease; leukocyte counts are usually less than 100,000/mm. These cells may be seen in the blood vessels and sinusoids of various organs. They are characterized by dense pleomorphic nuclei and eosinophilic cytoplasm which is occasionally granular. Microscopic lesions are frequently found in the spleen, liver and lung. The kidney, heart and pancreas are less frequently involved. Lymph nodes may be infiltrated by neoplastic cells.

COMPOUND RELATED INFLAMMATORY REACTION

This lesion is quite similar regardless of location or organ involved. The Bucrylate® is surrounded by fibrous connective tissue. Usually there is a mild inflammatory response consisting of macrophages and multinucleated foreign body giant cells adjacent to the fibrous capsule. The presence of the material and associated fibrous reaction may cause secondary changes such as atrophy of parenchyma or compromise of circulation and its secondary consequences.

PITUITARY GLAND ADENOMA

Adenomas of the anterior pituitary gland are very common in aged F344 rats. These lesions vary greatly in size from small microscopic proliferations to large masses that compress adjacent brain tissue. The microscopic appearance and cellular morphology are also variable. Cells may be arranged in sheets, nests, or acini; they are usually nearly spherical cellular proliferations which compress adjacent normal pituitary tissue. The cellular component may be either acidophils, basophils or chromophobes with variable cellular pleomorphism and tinctorial characteristics. Most pituitary adenomas are quite vascular and vascular dilatation and hemorrhage are very common. Occasionally pituitary adenomas may be composed of two or more nodules, each having different cellular morphology.

ADRENAL GLAND CORTICAL ADENOMA

Adenomas of the adrenal cortex are very common in old F344 rats. These lesions vary greatly in size from small microscopic lesions to large masses which involve large areas of the cortex. Cortical adenomas are discrete areas of cellular proliferation of normal adrenal cortical cells, or they may vary considerably in size, staining characteristics, and cellular arrangement. Frequently cells in adenomas are highly vacuolated. Nuclei may be hyperchromatic and larger than normal. Few mitotic figures are present. Adrenal cortical adenomas are highly vascular, and sinusoidal dilatation and hemorrhage is common.

UTERUS-ENDOMETRIAL STROMAL POLYP

Endometrial stromal polyps are fairly common in older female F344 rats. These lesions consist of polypoid masses which protrude from the uterine wall into the uterine lumen. The mass is covered by typical endometrial surface epithelium which may be eroded in some areas. Relatively normal appearing uterine glands, some of which are dilated and cystic, are common. The glands are surrounded by a dense fibrovascular stroma containing abundant collagen and numerous blood vessels. Some smooth muscle cells may be present. Mitotic figures may be present in both stroma and epithelium but these are usually few in number. Focal ulceration of epithelium accompanied by inflammatory cell infiltration may be present.

TESTIS-MESOTHELIOMA

Mesotheliomas of the tunica vaginalis occur occasionally in the testes of male F344 rats. These lesions are located on the serosal surface of the testis or epididymis and are usually unilateral. They are composed of multiple, papillary fronds arising from the serosal surface. The papillary structures have a supporting connective tissue stalk containing blood vessels and are covered by mesothelial cells. The lining usually consists of a single layer of mesothelial cells, but occasionally these cells are piled up into small nodular proliferations. Mitotic figures are infrequent.

Individual Animal Pathology Reports

The Pathology animal number is followed by a three digit toxicology "in-life" animal number in parenthesis. This Toxicology number is a shortened version of the 84D00--- numbering system referenced in the text and Appendix B. The dates of death on these reports for interim sacrifice females are recorded as 28 Jan 1985 when in fact the females were necropsied on 29 Jan 1985. All organs were weighed on the date the necropsy occurred. The date given under the organ weight section of each individual report is the date the hand recorded data were entered into the computer.

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DOCUMENTAL DENAL DISEASE	ADOLG LANDO			MOT COCCICION TOACC	(1)		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 3 (TOX NO. 9) SEX: MALE DOSE GR DATE OF DEATH: 28 JAN-85 STUDY DAY OF DEATH: 372 STUDY W	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 387.00 (GMS)
<pre></pre>	C TISSUE OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
PANCREASPERITONITIS	NOT SPECIFIED(TRACE)
MAMMARY GLANDS TISSUE IS MISSING	TISSUE IS MISSING

HEART - INTERESTANT - TREESTANT - ARRESTANT - INTERESTANT - INTERESTANT

			SIUDI SIAKI UKIE	מאוב: כז. לאי מל	NON S	STODY TYPE: CHRONIC/2 YR CARCINOGENIC	YR CARCINOGE
ANIMAL NUMBER: DATE OF DEATH:	4 28-JAN-85	10) AY OF DEA		GROUP: 1 WEEK OF DEATH:	 R1F1C	IIM SACRIFICE 1	CE 1 404.00 (GMS)
DATE	<< DAY/WEEK OF STUDY	ORGAN WE I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS	
12.0CT-85	629/90	11050	10 005				
12-0CT-85	629/90	KIONEYC	3 505	% C121.2	7.0864	1 01	
12-0CT-85	629/90	ADRENAL GLANDS	0.052		77771	žě	
12-0CT-85	629/90		70.0	\$ 4310.0 \$ 484.0	0.0204	ž.	
12 · 0CI · 85	629/90	HEART	007.1		1.0189	H1GH	
12-0CT-85	629/90	BRAIN	1 068		1.000.1	ž	
12·0cT·85	06/629	SPLEEN	0.661	0.1636 %	0.3359	HIGH	
RGAN NAME	×	KEYWORDS / PHRASES	AN OBSERV SEVERITY	<	COMMENTS		
ORGAN NAME			e D	GROSS FREE-T	COMMENTS		
LIVER EYES & OPTIC N.	· V -	ADHERED TO DIAPHRAGM. IRREGULAR EYE SURFACE	PRESENT	NT NI BILATERAL			
C M I C R C M I S R I C R C M I S R C R C M I S R C R C M I S R C M I S R R C M I S R R R R R R R R R R R R R R R R R R	>> PATHOLOGIC	1 8 0 0 5 0	C 11880E	OBSERVATIONS DISTRIBUTION (SEVERITY)	/ SPECIAL	COMMENTS	
ESOPHAGUS				TISSUE IS MISSING	9		
THYMUS				TISSUE IS MISSING	9.		
- CAPSULAR FOREIGN GRANULOMATOUS REALBILE DUCTULE EPITHELIAL HYPERPLASIA - NECROSIS	EPITHELIAL	CAPSULAR FOREIGN GRANULOMATOUS REAUTION -CAPSULAR FOREIGN GRANULOMATOUS REAUTION -BILE DUCTULE EPITHELIAL HYPERPLASIA -HEPATITIS -NECROSIS		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MODERATE) NOT SPECIFIED(MILD) NOT SPECIFIED(TRACE)	RESENT) DERATE) LD) ACE)		
PROGRESSIVE RENAL DISEASE	ENAL DISEA	SE		NOT SPECIFIED(TRACE)	ACE)		
DDOCTATE							

INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
MALE DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 1 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 404.00 (GMS)
T I S S U E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
NOT SPECIFIED(TRACE)
TISSUE IS MISSING
TISSUE IS MISSING

BEECH • SEECHERAL MANAGEMENT MANAGEMENT (* 1888) •

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER·344	INSTITUTE P, PATH SER	OF RESEARCH IV GP	_	INDIV S STUDY START DAT	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 START DATE: 23-JAN-84	:T STUDY TYPE:	CHRONI	PRINTED: 14-MAR-86 PAGE: 8 C/2 YR CARCINOGENIC
ANIMAL NUMBER: 55 DATE OF DEATH: 28-JAN-85	28-JAN-85	(Tox No. 13) STUDY DAY OF	 F DEA	SEX: MALE DO EATH: 372 ST	DOSE GROUP: 1 SACRIFICE STUDY WEEK OF DEATH: 54 TE	FICE STATUS: INTERIM SACRIFICE TERMINAL BODY WEIGHT: 40	RIFI	CE 1 407.00 (GMS)
DATE	A STUDY	O R G A N ORGAN NAME	W E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
12 · 0CT · 85 12 · 0CT · 85 12 · 0CT · 85	629/90 629/90 629/90	LIVER	SOME	12.565	3.0872 % 0.6160 %	6.9458		
12-0CT-85 12-0CT-85	629/90	TESTES HEART		3.344		0.05 4 1.8485 0.6694	H 10 -	
12 · 0CT · 85 12 · 0CT · 85	629/90 629/90	BRAIN SPLEEN		1.809 0.758	0.4445 % 0.1862 %	1.0000	HIGH	
LIVER	₹ . ₹	ADRERED TO OMENTUM	OMENTOM.	PRESENT	GKOSS FREETEXT	COMMENTS		
C M I C R C M I C R C I I SSUE / HISTOPATHOLOGIC FINDINGS	>A1HOLOG1C	: ~	S C 0 P I	3 7 8 8 1 1 3	E O B S E R V A T 1 O N S D1STR1BUT1ON (SEVER1TY)	>> / SPECIAL	COMMENTS	
TRACHEA					TISSUE IS MISSING			
SALIVARY GLAND			•		TISSUE IS MISSING			
THYMUS					TISSUE IS MISSING			
LYMPH NODES					TISSUE IS MISSING			
LIVER	IGN GRANULC EPITHELIAL S	OMATOUS REACHIVE PERPLASIA	1 1 0 N		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MODERATE) NOT SPECIFIED(MODERATE) NOT SPECIFIED(TRACE)	SENT) RATE) RATE)		

LETTERMAN ARMY INSTITUTE OF RESEARCH INDIVIDUAL ANIMAL JIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 I DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 5 (TOX NO. 13) SEX: MALE DOSE GROOMED OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY WE	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 407.00 (GMS)
<pre></pre>	OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
RECTUM	TISSUE IS MISSING
:ТОМАСН -> SEROSAL FIBROSIS	NOT SPECIFIED (PRESENT)
CIATIC NERVE	TISSUE IS MISSING
COMPOUND PRESENT WITH ASSOCIATED INFLAMMATION\FIBROSIS	NOT SPECIFIED (PRESENT)
D SEBACIOUS TISSUE IS MISSING	ISSUE IS MISSING

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PAIN SERV GP SPECIES: RAT/FISCHER 544	ARMY INSTITUTE S SUPP, PATH SER RAT/FISCHER: 544	OF RESEARCH RV GP	INDIVIDUAL ANIMAL STUDY START DAIE: 23-JAN-84	VIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 IE: 23∙JAN-84	ORT STUDY TYPE:	PRINTED: 14·MAR·86 PAGE: 10 PE: CHRONIC/2 YR CARCINGGENIC
ANIMAL NUMBER: DATE OF DEATH:	6 28-JAN-85	· .	MALE 372	DOSE GROUP: 1 STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 42	IM SACRIFICE 1 EIGHT: 420.00 (GMS)
DATE	A STUDY	ORGAN WE I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
12 · 0¢T · 85 12 · 0¢T · 85 12 · 0¢T · 85 12 · 0¢T · 85	629/90 629/90 629/90 629/90	LIVER KIDNEYS ADRENAL GLANDS TESTES	12.495 2.620 0.059	2.9750 % 0.6238 % 0.0140 %	6.4407	00 X00 X00 X00 X00 X00 X00 X00 X00 X00
12 · 0CT · 85 12 · 0CT · 85 12 · 0CT · 85	629/90 629/90 629/90	HEAST BRAIN BPLEEN SPLEEN	0.931 1.940 0.696		1.4340 0.4799 1.0000 0.3588	H01H
ORGAN NAME	· × · •	G R O S S O R G KEYWORDS / PHRASES ADHERED TO DIAPHRAGM	AN OBSERU SEVERITY PRESENT	A T I O N S >> GROSS FREE TEX	T COMMENTS INTESTINE, ADHESION MEASURES	MEASURES 3 X 4CM.
C M I C R C TISSUE / HISTOPATHOLOGIC FINDINGS		M I C R O S C O P I FINDINGS	CTISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	1 O N S >> VERITY) / SPECIAL COMMENT	MMENTS
LIVERCAPSULAR FOREIGN GRANULOMATOUS REAC .BILE DUCTULE EPITHELIAL HYPERPLASIA .NECROSIS	EPITHELIAL	IVERCAPSULAR FOREIGN GRANULOMATOUS REACTION .BILE DUCTULE EPITHELIAL HYPERPLASIA .NECROSIS		. TISSUE IS MISSING NOT SPECIFIED (PRESENT) NOT SPECIFIED(MARKED) NOT SPECIFIED(MILD)	G RESENT) RKED) LD)	
PROGRESSIVE RENAL DISEASE PANCREAS ACINAR (EXOCRINE) ATROPHY	RENAL DISEA	SE		NOT SPECIFIED(MILD) NOT SPECIFIED(TRACE)	LD) ACE)	

INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC	NIMAL NUMBER: 6 (TOX NO. 22) SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 1 ATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 420.00 (GMS)	O B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
INDIVIDUAL ANIMAL IV OF RES SUPP, PATH SERV GP STUDY NUMBER: PECIES: RAI/FISCHER:344 STUDY START DATE: 23-JAN-84	NIMAL NUMBER: 6 (TOX NO. 22) SEX: MALE DOSE (ATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY	ISSUE / HISTOPATHOLOGIC FINDINGS

TISSUE IS MISSING

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	P PATH SE	OF RESEARCH RV GP	INDIVIDU STUDY STUDY START DATE:	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 F DATE: 23-JAN-84		PR TPE: CHRONIC/	PRINTED: 14-MAR-86 PAGE: 12 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER DATE OF DEATH:	7 28-JAN-85	ANIMAL NUMBER: 7 (TOX NO. 24) S DATE OF DEATH: 28 JAN-85 STUDY DAY OF DEAT	SEX: MALE DOSE ATH: 372 STUDY	DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SAC 54 TERMINAL BODY WEIGHT:	RIM SACRIFICE	CE 1 381.00 (GMS)
DATE	<pre></pre>	_	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
12-0CT-85 12-0CT-85 12-0CT-85	629/90 629/90 629/90	LIVER KIDNEYS ADRENAL GLANDS	14.292 2.630 0.063		7.4866	. 9 9 9	
12 · 0CT · 85 12 · 0CT · 85 12 · 0CT · 85 12 · 0CT · 85	629/90 629/90 629/90 629/90	TESTES HEART BRAIN SPLEEN	3.273 1.527 1.909 0.738	0.8591 % 0.4008 % 0.5010 %	1.7145	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
ORGAN NAME	×	G R O S S O R G A	AN OBSERV SEVERITY	A T I O N S >>	COMMENTS		
LIVER	. ~	ADHERED TO DIAPHRAGM /	AND STOMACH PRESENT	ADHESION TO STOMA	STOMACH MEASURES 3/4CM	3/4CM IN DIAMETER.	
TISSUE / HISTOPATHOLOGIC FINDINGS	STOPATHOLOGIC	1 d 0 D S C	C TISSUE	BUT1	O N S >> CRITY) / SPECIAL COMMENTS	OMMENTS	
LIVER -CAPSULAR FOREIGN GRANULOMATOUS REAC-BILE DUCTULE EPITHELIAL HYPERPLASIA-NECROSIS	EIGN GRANUL	IVER -CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA -HEPATITIS -NECROSIS		NOT SPECIFIED (PRESEN NOT SPECIFIED (TRACE) NOT SPECIFIED (TRACE) NOT SPECIFIED (TRACE)	ING (PRESENT) MARKED) TRACE)		
KIDNEYFROGRESSIVE RENAL DISEASE	RENAL DISEA	SEASE		NOT SPECIFIED(TRACE)	(3		

LIVER

PROSTATE

KIDNEY

DATA REPORT GLP83009 STUDY TYPE: CHRONIC/2 YR CARCINGENIC	SACRIFICE STATU	OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	NOT SPECIFIED(TRACE)	NOT SPECIFIED(TRACE)
INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	DOSE GROUP: 1 STUDY WEEK OF DEATH:	O B S DISTR		
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 8 (TOX NO. 31) SEX: MALE DOSE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY	TISSUE / HISTOPATHOLOGIC FINDINGS	PROSTATEACUTE SUPPURATIVE PROSTATITIS	TESTES

	SPECIES: RAT/FISCHER-344	SCHER-344		STUDY START DATE: 23-JAN-84	73-JAN-84	LI TODIS	SIUDT ITPE: CHRONIC/2 TR CARCINGENIC
<pre></pre>	ANIMAL NUMBER: DATE OF DEATH:		(Tox No. 43) STUDY DAY OF DEA	.	1 F DEATH:		FICED MORIBUND EIGHT: 295.00 (GMS)
630/90	· · · · ·		W E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
630/90 KIDNEYS 2.054 630/90 ADRENAL GLANDS 0.068 630/90 HEART 0.739 630/90 BRAIN 1.908 630/90 SPLEEN 0.856		630/90	1	10.104		5.2956	
SOUND SOUN		630/90		2.054		1.0765	0K
630/90 630/90 630/90 630/90 630/90 630/90 630/90 630/90 630/90 630/90 8PEENT 8PRESENT 8PRESENT		630/90		2 837		1.4869	= = = = = = = = = = = = = = = = = = =
630/90 BRAIN 1.908 630/90 SPLEEN 0.856 630/90 SPLEEN 0.856 <pre></pre>		630/90	HEART	0.739		0.3873	MO1
630/90 SPLEEN 0.856 <		630/90	BRAIN	1.908		1.000	0 K
<pre></pre>	- 85	06/089	SPLEEN	0.856		0.4486	нген
/ HISTOPATHOLOGIC FINDINGS / HISTOPATHOLOGIC FINDINGS / HISTOPATHOLOGIC FINDINGS / HISTOPATHOLOGIC FINDINGS // NOT SPECIFIED (PRESENT) // NOT SPECIFIED (TRACE) // OSIS	LIVER PERITONEAL CAV.	·«co	DHERED TO DIAPHRAGM. MALL INTESTINE	PRESENT		STENDED WITH INGES A FISTULA HAS FINAL MUSCULATURE I	TA AND ADHERED TO LEFT SIDE ORMED FROM THE ADHERED ILEUM NTO SUBCUTANEOUS TISSUE. ULATED MASS OF GREEN INGESTA
ULAR FOREIGN GRANULOMATOUS REACTION DUCTULE EPITHELIAL HYPERPLASIA NOT	11SSUE / H1STOP	** ATHOLOGIC	0 S C 0 P I	1 S S D	O B S E R V A T I	>> / SPECIAL	OMMENTS
	LIVER	IGN GRANUL EPITHELIAL	OMATOUS REACTION HYPERPLASIA			ESENT) ERATE) CE)	
KIDNEY	KIDNEY	•			:		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 9 (TOX NO. 43) SEX: MALE DATE OF DEATH: 19-JUL-84 STUDY DAY OF DEATH: 179	DOSE GROUP: 1 SACRIFICE STATUS: SACRIFICED MORIBUND STUDY WEEK OF DEATH: 26 TERMINAL BODY WEIGHT: 295.00 (GMS)
C M I C R O S C O P I C T I S S U E TISSUE / HISTOPATHOLOGIC FINDINGS	JE OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
ILEUMCOMPOUND RELATED INFLAMMATORY REACTION	NOT SPECIFIED (PRESENT)
CECUM	TISSUE IS MISSING
RECTUM	TISSUE IS MISSING
TONGUE	TISSUE IS MISSING
MAMMASY GLANDS	TISSUE IS MISSING
PITUITARY GLAND	TISSUE IS MISSING

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	OF RESEARCH RV GP	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: 14-MAR-86 PAGE: 17 STUDY TYPE: CHRONIC/2 YR CARCINGENIC	14-MAR-86 17 RCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	10 28-JAN-85	ANIMAL NUMBER: 10 (TOX NO. 44) SEX DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH:	MALE 372	DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 38	RIM SACRIFICE 1 WEIGHT: 381.00 (GMS)	
DATE	OAY/WEEK OF STUDY	U E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	wn60
13-0CT-85 13-0CT-85	630/90		13.658	3.5848 % 0.6564 %	7.1172	8 8	
13.0CT-85 13.0CT-85	630/90	ADRENAL GLANDS TESTES	0.067	0.0176%	0.0349	0K H1GH	
13.001.85	630/90	HEART	1.221		0.6363	0K	
13 · 0CT · 85 13 · 0CT · 85	630/90	BRAIN Spleen	1.919 0.682	0.5037 % 0.1790 %	1.0000 0.3554	OK H I G H	
ORGAN NAME	*	G R O S S O R G KEYWORDS / PHRASES	AN OBSERVA SEVERITY	A T I O N S >> Y GROSS FREE-TEXT COMMENTS	OMMENTS		
LIVER		ADHERED TO DIAPHRAGM.	PRESENT	ADHESION ALSO INVOLVES OMENTUM AND PERITONEAL WALL	OLVES OMENTUM AND	PERITONEAL WALL.	
11SSUE / H1STO	 PATHOLOGIC	<pre></pre>	CTISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	T I O N S >> (SEVERITY) / SPECIAL	COMMENTS	
HEART				NOT SPECIFIED(TRACE)	SE)		
LIVER	EIGN GRANU EPITHELIA	IVER		NOT SPECIFIED (PRESENT) NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	ESENT) SE) SE)		
KIDNEYPROGRESSIVE RENAL DISEASE	DEMA! DISE			NOT SPECIFIED (TRACE)	G.		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23.JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 10 (TOX NO. 44) SEX: MALI DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372		SACRIFICE STATU SATH: 54 TERMINA
<pre></pre>	1 C TISSUE	O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
ILEUM	TISSUE IS MISSING	TISSUE IS MISSING
RECTUM	TISSUE IS MISSING	TISSUE IS MISSING
NOSE/TURBINATESACUTE INFLAMMATION		NOT COECTETENATES

SECTION OF THE PROPERTY OF THE PARTY OF THE

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER·344	INSTITUTE P, PATH SE ISCHER-344	OF RESEARCH RV GP	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PE: CHRONIC	PRINTED: 14-MAR-86 PAGE: 1 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 12 DATE OF DEATH: 28-JAN-85	12 28-JAN-85	12 (TOX NO. 48) SEX: MALE N.85 STUDY DAY OF DEATH: 372	:	DOSE GROUP: 1 SACRIF STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 1 54 TERMINAL BODY WEIGHT: 380.	IM SACRIFIC	CE 1 380.00 (GMS)
DATE	DAY/WEEK OF STUDY	ORGAN WE	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13.001.85	630/90	LIVER	10.871	2.8608 %	5.7671	100 100 100 100 100 100 100 100 100 100	
13 · 0CT · 85	630/90	KIONEYS	2.459	0.0189 %	0.0382	ĕ	
13-001-85	650/90	AUXENAL GLANDS		0.8579 %	1.7294	H 1 GH	
13 - OC 1 - 65 13 - OC 1 - 85	630/90	HEART	1.242	0.3268 %	0.6589	ž ;	
13 OCT 85	630/90	BRAIN	1.885	0.4961 %	1.0000	A0 4	
13-001-85	06/029	SPLEEN	0.653	0.1718 %	0.3404	יפוע	
ORGAN NAME	*	GROSS OR KEYWORDS / PHRASES	G A N O B	S E R V A T T O N S >> SEVERITY GROSS FREE-TEXT COMMENTS	DAMENTS		
LIVER		ADHERED TO DIAPHRAG	ŗ	PRESENT 3 X 2CM AREA.			
	V	< M I C R O S C O P	1 C T 1 S S U E	E O B S E R V A T I O N S	ONS >> COMMENTS	COMMENTS	
11SSUE / H1STC	DPATHOLOGII	C FINDINGS					

STOMACH

INSTITUTE OF RESEARCH , PATH SERV GP SCHER-344 STUDY STAR	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER; GLP83009 STUDY START DATE: 23 JAN-84 STUDY START DATE: 23 JAN-84
ANIMAL NUMBER: 12 (TOX NO. 48) SEX: MALE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 FERMINAL BODY WEIGHT: 380.00 (GMS)
s 1 2	S U E O B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
STOMACHVILLUS ATROPHY AND/OR AUTOLYSIS	
MAMMARY GLANDS TISSUE IS MISSING	TISSUE IS A ISSUE

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER·344	INSTITUI P, PATH S ISCHER-34	F OF RESEARCH SERV GP STU	INUI DY START DA	VIUGAL ANIMAL CAIR ALFONI STUDY NUMBER: GLP83009 TE: 23-JAN-84		STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	EN 1
NNIMAL NUMBER:	03-APR-8	ANIMAL NUMBER: 17 (TOX NO. 65) SEX: DATE OF DEATH: 03-APR-84 STUDY DAY OF DEATH:	MALE 72	1 F DEATH:	SACRIFICE STATUS: SACRIFICED MORIBUND	FICED MORIBUND EIGHT: 245.00 (GMS)	:
DATE	DAY/WEEK	ORGAN WE I	G H T S >> ABSOLUTE ORGAN R WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN Weight ratio	ORGAN STATUS	
13.0CT-85 13.0CT-85	630/90		:	3.265 % 0.7114 %	4.4412	0K 0K 0K	
13.0CT-85 13.0CT-85	630/90	ADRENAL GLANDS TESTES	0.065 2.860 0.712	0.0203 % 1.1673 % 0.2906 %	1.5871	301H	
13 · 0C1 · 85 13 · 0C1 · 85 13 · 0C1 · 85	06/089 930/90 930/90	HEAKI BRAIN SPLEEN	1.802		1.0000	0K H1GH	
ORGAN NAME		GROSS ORGAN KEYWOROS/PHRASES	O B S E R V A SEVERITY	A T T O N S >> GROSS FREE-TEXT COMMENTS	COMMENTS		• •
LIVER PERITONEAL CAV.	·	ADHERED-DIAPHRAGM & PERI	TONEUM, PRESENT	VENTRAL ABDOMEN 1LEUM ADHERED TO THE PERIN RECTUS ABDOMINIS MUSCLE AN POCKET FILLED WITH INGESTA	EUM AND D FORMS	COMMUNICATES THROUGH THE A 4 X 4 X 4 CM SUBCUTANEOUS	S
11SSUE / H1STO	>> >>ATHOLOGI	<pre></pre>	T 1 S S U E	O B S E R V A T 1 O N S DISTRIBUTION (SEVERITY)	I O N S >> VERITY) / SPECIAL COMMENTS	OMMENTS	
LIVER	REIGN GRAI	JVERCAPSULAR FOREIGN GRANULOMATOUS REACTION		NOT SPECIFIED (PRESENT)	RESENT)		
PROSTATE	•			. TISSUE IS MISSING	g		
COAG GL	•			. TISSUE IS MISSING	9		

Exercis Services Serv

EDIDIDYMIS

...... TISSUE IS MISSING

TUTE OF RESEARCH 1 SERV GP STUDY NUMBER: GLP8 344 STUDY START DATE: 23-JAN-84	17 (TOX NO. 65) SEX: MALE DOSE GROUP: 1 SACRIFICE STATU 03-APR-84 STUDY DAY OF DEATH: 72 STUDY WEEK OF DEATH: 11 TERMINA	<pre></pre>	GLANDS TISSUE IS MISSING	EMUR
LETTERMAN ARMY INSTI DIV OF RES SUPP, PAT SPECIES: RAT/FISCHER	ANIMAL NUMBER: DATE OF DEATH: (TISSUE / HISTOPA	MAMMARY GLANDS	BONE, FEMUR

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER·344	INSTITUTI P, PATH SI ISCHER-344	E OF RESEARCH ERV GP 4	INDIVIDU STUDY START DATE:	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	RT STUDY TYPE:	PRINTED: 14-MAR-86 PAGE: 1 IYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: DATE OF DEATH:	17-FEB	51 (Tox No. 150) SEX: M 84 STUDY DAY OF DEATH: 26	ALE	DOSE GROUP: 1 SACR STUDY WEEK OF DEATH: 4	SACRIFICE STATUS: SACRIFICED MORIBUND 4 TERMINAL BODY WEIGHT: 152.	WEIGHT: 152.00 (GMS)
DATE	C STUDY	ORGAN NAME	I G H T S ->- ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
13 · 0CT · 85 13 · 0CT · 85	630/90	LIVER KIDNEYS ADRENAL GLANDS		3.4737 % 0.7829 % 0.0395 %	3.2593 0.7346 0.0370	0K 0K H1 GH
13 · 0CT · 85	630/90		2.110		1.3025 0.3148 1.0000	H16H OK H16H
13 · 0CT · 85	630/90	BRAIN SPLEEN	0.210	0.1382 %	0.1296	HJ IH
ORGAN NAME		RETWORDS / PREASESRED/BROWN CRUSTY MATERIAL ADHERED TO DIAPHRAGM.	TERIAL. PRES	OMENTUM, STOMACH,	LOOPS OF	SMALL INTESTINE AND DIAPHRAGM
STOMACH PERITONEAL CAV		DILATED SMALL INTESTINE	PRESENT PRESENT	_	ADHERED IO LIVER DISTENDED WITH FOOD JEJUNUM DISTENDED WITH FOOD AND FLUID	רחוס
C M I C R C M I C R C M I STOPATHOLOGIC FINDINGS	>> >>ATHOLOGI	M I C R O S C O P C FINDINGS	N S S I L D I	E O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	I O N S >> VERITY) / SPECIAL	COMMENTS
PARATHYROID .	:			IISSUE IS MISSING	و	
LIVER	EIGN GRAN	TVERCAPSULAR FOREIGN GRANULOMATOUS REACTION		NOT SPECIFIED (PRESENT	RESENT)	
PANCREAS				NOT SPECIFIED(TRACE)	ACE)	

INDIVIDUAL ANIMAL DIV OF RES SUPP. PATH SERV - D SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344	DAT GLP
ANIMAL NUMBER: 51 (TOX NO. 150) SEX: MALE DOSE GROUP: 1 DATE OF DEATH: 17-FEB-84 STUDY DAY OF DEATH: 26 STUDY WEEK OF D	DOSE GROUP: 1 SACRIFICE STATUS: SACRIFICED MORIBUND STUDY WEEK OF DEATH: 4 TERMINAL BODY WEIGHT: 152.00 (GMS)
CISSUE / HISTOPATHOLOGIC FINDINGS	C T I S S U E O B S F R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
CECUM TISSUE IS MISSING	TISSUE IS MISSING
MAMMARY GLANDSTISSHE IS MISSIMG	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	/ INSTITUTE PP, PATH SE :1SCHER-344	OF RESEARCH RV GP	INDIVIDUAL STUDY STUDY START DATE: 23	ANIMAL DATA NUMBER: GLP83 JAN-84	STU	CHRONI	PRINTED: 14-MAR-86 PAGE: 1 C/2 YR CARCINOGENIC
IAL NUMBE OF DEAT	65 28-JAN-85	(TON NO. 3)	MALE 372	GROUP: 2 WEEK OF DEATH:	ICE STATUS TERMINAL	SACRIFI GHT:	CE 1 393.00 (GMS)
DATE	DAY/WEEK OF STUDY	•	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13 0 0 1 8 5	630/90	LIVER	10.077		5.1361	MOT	
13.001.85	630/90	KIDNEYS	2.463	0.6267 %	1.2554	0K	
13 · 0C1 · 85	630/90				1.6820	H 1 G H	
13 · 0CT · 85	630/90	HEART	1.455		0.7416	ò	
13 - 001 - 85	630/90	BRAIN	1.962	0.4992 %	1.0000	NO T	
		2) - -)	;	
ORGAN NAME	Ÿ	G R O S S O R KEYWORDS / PHRASES	GAN OBSERV SEVERITY	A T I O N S >> GROSS FREE-TEXT	COMMENTS		
EYES & OPTIC N LIVER SKIN		CORNEAL OPACITY ADHERED TO OMENTUM. INCISION SITE	PRESENT PRESENT PRESENT	IT . ADHESION ON STERNUM	RNUM .5 CM; ADHESION	ON TO MESENTRY	Y .5 CM
<pre></pre>	>> PATHOLOGIC	M I C R O S C O P FINDINGS	I C T I S S U E	O B S E R V A T I	T 1 0 N S >> (SEVERITY) / SPECIAL (COMMENTS	
ESOPHAGUS				TISSUE IS MISSING			
HEART				NOT SPECIFIED(TRACE)	CE)		
SPLEEN	SULAR			NOT SPECIFIED(TRACE)	CE)		
LIVER	ETGN GRAND	IVERCAPSULAR FOREIGN GRANULOMATOUS REACTION BILE DUCTULE ITHELIAL HYPERPLASIA		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MILD)	ESENT) D)		
KIDNEY				:			

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 69 (TOX NO. 3) SEX: MALE DOSE G DATE OF DEATH: 28 JAN 85 STUDY DAY OF DEATH: 372 STUDY	DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 393.00 (GMS)
C M I C R O S C O P I C T I S S U E TISSUE / HISTOPATHOLOGIC FINDINGS	O B S E R V A 7 I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
KIDNEY .PROGRESSIVE RENAL DISEASE	NOT SPECIFIED(TRACE)
TESTES	NOT SPECIFIED(TRACE) (PRESENT)
MAMMARY GLANDS	TISSUE IS MISSING
EYES & OPTIC N	NOT SPECIFIED(MILD)

DIV OF KES SUPP, PAIR SERV UP SPECIES: RAT/FISCHER·344	15CHER-344	, .	STUDY START	DATE: 23-JAN-84	מרוסים	STUDY	YPE: CHRON	CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH: 28-	28-JAN	70 (Tox No. 4) -85 STUDY DAY OF DE	SEX: MALE DEATH: 372	DOSE GROUP: STUDY WEEK	2 OF DEATH:	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 40	INTERIM SACRIF BODY WEIGHT:	1CE 1 407.00 (CMS)
DATE	A CONTRACT C	O R G A N W	E I G H T S ABSOLUTE WEIGHT (. X	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13.001.85	630/90	LIVER	10.906	:	2.6796 %	5.7673	. F07	
13 · 0CT · 85	06/059	ADRENAL GLANDS			0.0143 %	0.0307	ă	
13-0CT-85	630/90	TESTES	3.123			1.6515	H1GH	
13 · 0C1 · 85	630/90	REAK	1 891		0.4646 %	1.0000	30.	
13 · 0CT · 85	630/90	SPLEEN	0.687			0.3633	H 1 G H	
LIVER		ADHERED TO OMENTUM.	 UM.	PRESENT D	DIAPHRAGMATIC LOBE	L08E		
C M I C R O TISSUE / HISTOPATHOLOGIC FINDINGS	PATHOLOGIC	M I C R O S C O P FINDINGS	S 1 1 0 1	SUE	O B S E R V A T I O N S	T I O N S >> (SEVERITY) / SPECIAL	COMMENTS	
HEART				· · · · · · · · · · · · · · · · · · ·	NOT SPECIFIED(TRACE)	(TRACE)		
LIVERCAPSULAR FOR -BILE DUCTULE	EIGN GRANUL	IVER		ž X	NOT SPECIFIED NOT SPECIFIED(SPECIFIED (PRESENT) SPECIFIED(MODERATE)		
KIDNEYPROGRESSIVE RENAL DISEASE	RENAL DISEA	4 S E		· · · · · · · · · · · · · · · · · · ·	NOT SPECIFIED(MILD)	(MILD)		
TESTES	CELL HYPER	TITIAL CELL HYPERPLASIA			NOT SPECIFIED(TRACE)	(TRACE)		
PANCREAS	:			:				

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 7 DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGEN
ANIMAL NUMBER: 70 (TON NO. 4) SEX: MALE DOSI DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STU	DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH; 54 TERMINAL BODY WEIGHT: 407.00 (GMS)
TISSUE / HISTOPATHOLOGIC FINDINGS	OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
PANCREAS	
ADRENAL -B- CORTICAL ADENOMA	(DRESEUT)

	Brow	_{in} 618	S	,			· · ·			
FAGE: 5 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	M SACRIFICE 1 IGHT: 391.00 (GMS)	ORGAN STATUS	H1GH 00 00 10 10 10 10 10 10 10 10 10 10 10 10 10 1	н16н			MMENTS			
	SACRIFICE STATUS: INTERIM SACRIFICE 1 54 TERMINAL BODY WEIGHT: 391.	ORGAN TO BRAIN WEIGHT RATIO	5.0686 1.2013 0.0320 1.4832 0.5894	0.3305	COMMENTS		I O N S >> EVERITY) / SPECIAL COMMENTS	NG	RACE)	PRESENT) ARKED)
SIUUT NUMBER: GLF03009 TE: 23-JAN-84	DOSE GROUP: 2 SACI	RELATIVE % OF BODY WEIGHT	2.5887 % 0.6136 % 0.0154 % 0.7575 %		V A T I O N S >> TY GROSS FREE-TEXT	þ os	OBSERVATIONS DISTRIBUTION (SEVERITY)	TISSUE IS MISSING	NOT SPECIFIED(TRACE)	NOT SPECIFIED (PRESENT) NOT SPECIFIED(MARKED)
STUDY START DATE: 23-JAN-84	X: MALE : 372	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	10.122 2.399 0.064 2.962 1.177	0.000	AN OBSERV SEVERITY	DGNIZED PRESENT	C TISSUE			
	OF DEAT	N E I G	GLANDS		O R G	NS RECO	0 P I			NO I
	(Tox No. 5) STUDY DAY	O R G A N ORGAN NAME	LIVER KIDNEYS ADRENAL G TESTES HEART	SPLEEN	G R O S S O R G KEYWORDS / PHRASES	NO GROSS LESIONS RECOGNIZED	M I C R O S C O P I C FINDINGS			.capsular foreign granulomatous reaction -bile ductule epithelial hyperplasia
, PATH SEF ISCHER-344	71 28-JAN-85	A STUDY	630/90 630/90 630/90 630/90	630/90	*	_	** ** ** ** **		۲۸	EPITHELIA
DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 71 (TOX NO. 5) SE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH	DATE	13.0CT-85 13.0CT-85 13.0CT-85 13.0CT-85 13.0CT-85	13 · 0CT · 85	ORGAN NAME	WHOLE BODY	ISSUE / HISTOPATHOLOGIC FINDINGS	ESOPHAGUS	HEART	LIVER

NOT SPECIFIED (MILD)

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	
ANIMAL NUMBER: 71 (TON NO. 5) SEX: MALE DOSE G DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY	DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 391.00 (GMS)
C M I C R O S C O P I C T I S S U E TISSUE / HISTOPATHOLOGIC FINDINGS	1 C T I S S U E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
MAMMARY GLANDS TISSUE IS MISSING	. TISSUE IS MISSING .
AD SEBACIOUS IISSUE IS MISSING	TISSUE IS MISSING

SPECIES. AAI/FISCHER 344	STUDY	Y START DATE: 23-JAN-84	מאא מל			
	SEX: MALE OF DEATH: 372	· · · · · ·	2 OF DEATH:	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 36	ERIM SACRIFICE WEIGHT: 360	CE 1 360.00 (GMS)
<pre><< 0 R G A N DAY/WEEK OF STUDY ORGAN NAME</pre>	W E 1 G	H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
LIVER KIDNEYS ADRENALG	SUANDS	9.419 2.182 0.076	2.6164 % 0.6061 % 0.0211 %	4.8904 1.1329 0.0395	LOW 0K	
		2.960	0.8222 % 0.3144 % 0.5350 %	1.5369 0.5877 1.0000	H I GH OK OK	
SPLEEN		0.586		0.3043	нзсн	
ADHERED TO DIAPHRAGM	DIAPHRAGM.	PRESENT	1 CM ADHESION			
<pre></pre>	C 0 P I C	TISSUE	OBSERVATIONS DISTRIBUTION (SEVERITY)	/ SPECIAL	COMMENTS	
IVER	NO11		NOT SPECIFIED (PRES	(PRESENT) Mild)		
IDNEYPROGRESSIVE RENAL DISEASE			. NOT SPECIFIED(TRA	ICE)		
			. TISSUE IS MISSING	-		
			. TISSUE IS MISSING			
			NOT SPECIFIED(TRA	(CE)		
	E A S E			NOT	NOT NOT SELL SELL SELL SELL SELL SELL SELL SEL	NOT

DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	PP, PATH SE	OT RESEARCH RV GP	STUDY START DATE: 23-JAN-84	NUMBER: GLP83009 3-JAN-84	STUDY TYPE:	PAGE: 8 PRE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	MBER: 73 EATH: 28-JAN-85		SEX: MALE DOSE G ATH: 372 STUDY	DOSE GROUP: 2 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 38	RIM SACRIFICE 1 JEIGHT: 383.00 (GMS)
DATE	C C STUDY	O R G A N W E I	1 G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
13 · 0CT · 85	630/90		9.352	2.4418 % 0.6055 %	1.2003	HON
13 · OCT · 85	630/90	ADRENAL GLANDS TESTES LEADI	0.058 2.985 0.083	0.7794 %	1.5450	H 1 G H
13 · 0CT · 85 12 · NOV · 85	630/90 660/95	BRAIN	1.932 0.723		1.0000	OK HIGH
LIVER EYES & OPTIC N		ADHERED TO DIAPHRAGM. IRREGULAR EYE SURFACE	PRESENT CE. PRESENT	1 CM BILATERAL		
LIVER EYES & OPTIC N		ADHERED TO DIAPHRAGI IRREGULAR EYE SURFAG		1 CM BILATERAL		
TISSUE / HISTO	<pre></pre>	M I C R O S C O P I FINDINGS	I C TISSUE	Q B S E R V A T I	T I O N S >> (SEVERITY) / SPECIAL C	COMMENTS
PARATHYROID .				. TISSUE IS MISSING		
CAPSULAR FOREIGN -CAPSULAR FOREIGN -BILE DUCTULE EPI -REPATITIS -FOCUS BASOPHILIC	REIGN GRANU: E EPITHELIA	CAPSULAR FOREIGN GRANULOMATOUS REACTION -CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA -HEPATITIS -FOCUS BASOPHILIC		NOT SPECIFIED (PRESENT NOT SPECIFIED(MODERATE NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	(PRESENT) MODERATE) TRACE) TRACE)	
KIDNEYPROGRESSIVE RENAL DISEASE	RENAL DISE	A S E		NOT SPECIFIED(TRACE)).E)	
PROSTATE						

SPECIES: RAI/FISCHER-344 STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YO CARCTURE AND CARCTURE A
ANIMAL NUMBER: 73 (TOX NO. 12) SEX: MALE DOSE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY	DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 383.00 (GMS)
TISSUE / HISTOPATHOLOGIC FINDINGS	
PROSTATE - ACUTE SUPPURATIVE PROSTATITIS	NOT SPECIFIED(TRACE)
TESTESINTERSTITIAL CELL HYPERPLASIA	NOT SPECIFIED(TRACE)
PANCREASACINAR (EXOCRINE) ATROPHY	. NOT SPECIFIED(MILD)
AD SEBACIOUS	TISSUE IS MISSING

LETTERMAN ARM! INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	r INSTITUTE PP, PATH SE :1SCHER-344	OF RESEARCH RV GP	INDIVIDU STUD STUDY STARI DAIE:	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	STUDY TYPE:	PRINTED: PAGE: PE: CHRONIC/2 YR C	PRINTED: 14-MAR-86 PAGE: 10 CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	74 28-JAN-85	ANIMAL NUMBER: 74 (TOX NO. 14) SEX: MADATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	· · · · · ·	GROUP: 2 WEEK OF DEATH:	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 401	INTERIM SACRIFICE 1 BODY WEIGHT: 405.00	(GMS)
DATE	A CALLON OF STUDY	O R G A N W E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13 · 0CT · 85 13 · 0CT · 85 13 · 0CT · 85 13 · 0CT · 85	630/90 630/90 630/90 630/90	LIVER LIVER KIDNEYS ADRENAL GLANDS TESTES	12.039 2.796 0.087 3.291	2.9726 % 0.6904 % 0.0215 % 0.8126 %	5.9688 1.3862 0.0431 1.6316	H10H N0 P10H	
13.0CT-85 13.0CT-85 13.0CT-85	630/90 630/90 630/90	HEART BRAIN SPLEEN	1.448 2.017 0.740		0.7179 1.0000 0.3669	OK OK HIGH	
ORGAN NAME	*	G R O S S O R G KEYWORDS / PHRASES	AN OBSERV SEVERITY	A T I O N S >> GROSS FREE-TEXT	COMMENTS		
LIVER EYES & OPTIC N		ADHERED TO PERITONEAL WALL IRREGULAR EYE SURFACE.	L WALL PRESENT E. TRACE	VENTRAL MARGIN OF LIVER LEFT	LIVER 2 CM ADHESION	NO	
* M 1 C R 1 L STOPATHOLOGIC FINDINGS	0PATHOLOGIC	M I C R O S C O P I FINDINGS	C 11880E	E R BUTI	ONS >> ERITY) / SPECIAL	COMMENIS	
LIVER CAPSULAR FOR	AR FOREIGN GRANULOMATOU	IVER		TISSUE IS MISSING NOT SPECIFIED (PRESENT) NOT SPECIFIED(MILD)	ESENT) D)		
KIDNEY	RENAL DISE	1SE		NOT SPECIFIED(MILD)	(0		
·INTERSTITIAL	CELL HYPER	INTERSTITIAL CELL HYPERPLASIA		NOT SPECIFIED(MILD)	(0		

	Br	own6	24
PRINTED: 14-MAR-86 PAGE: 11 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 405.00 (GMS)	OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	
INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	E DOSE GROUP: 2 STUDY WEEK OF DEAT	PIC TISSUE OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPE	TISSUE IS MISSING
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUFP, PATH SERV GP SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 74 (TON NO. 14) SEX: MAL DATE OF DEATH: 28 JAN 85 STUDY DAY OF DEATH: 372	<pre></pre>	MAMMARY GLANDS

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	Y INSTITUTE PP, PATH SE FISCHER 344	OF RESEARCH RV GP	INDIVIDUAL STUDY N STUDY START DATE: 23.	NDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 DATE: 23-JAN-84	T STUDY TYPE:	PRINTED: 14.MAR.86 PAGE: 12 YPE: CHRONIC/2 VP CABCILOGENIC
ANIMAL NUMBER: DATE OF DEATH:	75 : 28-JAN-85	(Tox No. 15) Study DAY OF DEA	SEX: MALE DOSE (ATH: 372 STUDY	SROUP: 2 WEEK OF DEATH:	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 41	 1 9.00
DATE	DAY/WEEK OF STUDY	ORGAN WAME	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
13.0CT-85 13.0CT-85 13.0CT-85 13.0CT-85 13.0CT-85	630/90 630/90 630/90 630/90 630/90	LIVER KIDNEYS ADRENAL GLANDS TESTES HEART	11.523 2.684 0.083 3.149 1.536	2.7501 % 0.6406 % 0.0198 % 0.7516 %	5.9214 1.3792 0.0427 1.6182	LOW OK OK HIGH
13 · 007 · 85 13 · 007 · 85	630/90 630/90	BRAIN SPLEEN	1.946	0.4644 % 0.1697 %	1.0000 0.3654	00X 101 101 101
ORGAN NAME		G R D S D R G KEYWORDS / PHRASES	AN OBSERV SEVERITY	NS >>	COMMENTS	
LIVER	4	101	PRESENT	1 CM	•	
TISSUE / HISTOPATHOLOGIC FINDINGS		J d O J S C	C TISSUE	0 B S E R V A T I O N S ISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS
LIVER	EIGN GRANUL EPITHELIAL 11.1C	TVER CAPSULAR FOREIGN GRANULOMATOUS REACTION BILE DUCTULE EPITHELIAL HYPERPLASIA HEPATITIS FOCUS BASOPHILIC NECROSIS		. NOT SPECIFIED (PRESE NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	(PRESENT) TRACE) TRACE) TRACE)	
KIDNEYPROGRESSIVE RENAL DISEASE	RENAL DISEA	SE		NOT SPECIFIED(TRACE)		
TESTES	CELL HYPER	TITIAL CELL HYPERPLASIA		NOT SPECIFIED(MILD)		

Brown626

KKKKING BOOKS CHARACTER CONSTRUCTION OF SERVICE STATES.

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP STUDY NUMBER: GLP83009 SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344 STUDY START DATE: 23-JAN-84	PRINTED: 14-MAR-86 PAGE: 13
ANIMAL NUMBER: 75 (TON NO. 19) SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 1 DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 419.00 (GMS)	B (GMS) 00.09
TISSUE / HISTOPATHOLOGIC FINDINGS OF 1 C T 1 S S U E O B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	
MAMMARY GLANDS TISSUE IS MISSING	526
EYES & OPTIC N	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PAIN SERV GP SPECIES: RAT/FISCNER-344	Y INSTITUTE PP, PATH SE FISCHER: 344	E OF RESEARCH	INDIVII ST STUDY START DATE	INDIVIDUAL ANIMAL DATA REPORT STUOY NUMBER: GLP83009 T DATE: 23-JAN-84	T STUDY TYPE:		PRINTED: 14-MAR-86 PAGE: 14 CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: DATE OF DEATH:	48ER: 76 EATH: 28 JAN 85	(FOX NO. 25) STUDY DAY OF DEA		DOSE GROUP: 2 STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 40	IM SACRIFIC	CE 1 400.00 (GMS)
DATE	A STUDY	O R G A N W E I	G N T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13 · 0C1 · 85 13 · 0C1 · 85 13 · 0C1 · 85	630/90	LIVER KIDNEYS ADRENAL GLANDS	11.870 2.635 0.067		5.9320 1.3168 0.0335	LOW	
13 · 0CT · 85 13 · 0CT · 85 13 · 0CT · 85 13 · 0CT · 85	630/90 630/90 630/90 630/90	TESTES HEART BRAIN SPLEEN	3.157 1.058 2.001 0.680	0.7893 % 0.2645 % 0.5002 % 0.1700 %	1.566 0.5287 1.0000 0.3398	104 104 0K H16H	
ORGAN NAME	, , , , , , , , , , , , , , , , , , ,	G R O S S O R G KEYWORDS / PHRASES ADHERED TO DIAPHRAGM. FOCAL CORNEAL OPACITY	A W O B S E R V SEVERITY PRESENT	A T 1 0 N S >> GROSS FREE TEXT	.5 x .5		
11SSUE / H1ST	/ HISTOPATHOLOGIC FINDINGS	M I C R O S C O P I	C TISSUE	OBSERVA DISTRIBUTION	(SEVERITY) / SPECIAL C	COMMENTS	
LIVER CAPSULAR FO	REIGN GRANIE EPITHELI	1VER		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MODERATE)	ESENT) ERATE)		
KIDNEYPROGRESSIVE RENAL DISEASE	RENAL DIS	SSIVE RENAL DISEASE		NOT SPECIFIED(MILD)	0)		
TESTES	יר כברר אגע	ERPLASIA		NOT SPECIFIED(TRACE)	CE)		
EYES & OPTIC N	۸L	12AT 10N		NOT SPECIFIED(TRACE)	.CE.)		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SEI ISCHER-344	OF RESEARCH RV GP	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23.JAN-84	VIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 TE: 23-JAN-84		PRINTED: 14-MAR-86 PAGE: 15 STUDY TYPE: CHRONIC/2 YR CARCINGENIC	36 ::
ANIMAL NUMBER: DATE OF DEATH:	77 28-JAN-85	ANIMAL NUMBER: 77 (TOX NO. 26) SEX DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH:	: MALE 372	DOSE GROUP: 2 SACR1 STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 37	IM SACRIFICE 1 EIGHT: 378.00 (GMS)	Bro :
DATE	A STUBY	O R G A N W E I G	H T S S S S S S S S S S S S S S S S S S	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS	wn62
13 · 0 c f · 85 13 · 0 c f · 85 13 · 0 c f · 85	630/90 630/90 630/90	LIVER KIDNEYS ADRENAL GLANDS	9.807 2.394 0.075	2.5944 % 0.6333 % 0.0198 %	5.0578 1.2347 0.0387	30 30 10 10	8
13.0CT.85 13.0CT.85 13.0CT.85 13.0CT.85	630/90 630/90 630/90 630/90	TESTES HEART BRAIN SPLEEN	3.277 0.981 1.939 0.697	0.8669 % 0.2595 % 0.5130 % 0.1844 %	1.6900 0.5059 1.0000 0.3595	H16H OK H16H	
ORGAN NAME	×	G R O S S O R G KEYWORDS / PHRASES ADHERED TO DIAPHRAGM.	AN OBSERVE SEVERITY PRESENT	A T 1 O N S >> GROSS FREE-TEXT	COMMENTS		;
115SUE / H1STOF	>> PATHOLOGIC	C M I C R O S C O P I C TISSUE / HISTOPATHOLOGIC FINDINGS	CTISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	, special	COMMENTS	;
LIVER CAPSULAR FORE	EIGN GRANU! EPITHELIAL	IVER		NOT SPECIFIED (PRESEN	(PRESENT) Marked)		
KIDNEY	RENAL DISE	ASE		NOT SPECIFIED(TRACE)	CE)		
PROSTATE	PROSTATITIS	PROSTATITIS		NOT SPECIFIED(TRACE)	()		

AD SEBACIOUS

...... TISSUE IS MISSING

SPECIES: RAI/FISCHER: 344	PP, PATH SER FISCHER-344	Ur KESEAKCH V GP	INDIVIDU STUDY STUDY START DATE:	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	RI STUDY TYPE:	PRI CHRONIC/2	NTED: 14-MAR·86 PAGE: 16 YR CARCINOGENIC
ANIMAL NUMBER DATE OF DEATH	78 (28-JAN-85	ANIMAL NUMBER: 78 (TOX NO. 29) SEX: MA DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372		DOSE GROUP: 2 SACR STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SA 54 TERMINAL BODY WEIGHT	STATUS: INTERIM SACRIFICE 1 RMINAL BODY WEIGHT: 350.00	
DATE	DAY/WEEK OF STUDY	ORGAN WE	1 G H T S >> ABSOLUTE ORGAN UE1GHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS	1 1 1 1 1 1 1 1
13 · 0CT · 85 13 · 0CT · 85 13 · 0CT · 85	06/089 06/089 06/089	LIVER KIDNEYS ADRENAL GLANDS	9.667 2.307 0.076	2.7620 % 0.6591 % 0.0217 %	5.2653	101 101	
13.0CT-85 13.0CT-85 13.0CT-85	630/90 630/90 630/90	TESTES HEART BRAIN	2.971 1.025 1.836	0.8489 % 0.2929 % 0.5246 %	1.6182 0.5583 1.0000	MON NO N	
50. (70.5)	06/059	SPLEEN	0.602	0.1720 %	0.3279	н16н	
ORGAN NAME	>> 	G R O S S O R KEYWORDS / PHRASES	GAN OBSERV SEVERITY	A T I O N S >> GROSS FREE-TEXT	COMMENTS		· · · · · · · · · · · · · · · · · · ·
LIVER		ADHERED DIAPHRAGM &	PERITONEUM, PRESENT				
ISSUE / HISTO	PATHOLOGIC F.	TISSUE / HISTOPATHOLOGIC FINDINGS	1 C T I S S U E	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	/ SPECIAL	COMMENTS	
PARATHYROID .				TISSUE IS MISSING			
LIVER	VER	EVERCAPSULAR FOREIGN GRANULOMATOUS REACTION		 NOT SPECIFIED (PRESENT) NOT SPECIFIED(MODERATE)	SENT) RATE)		
FROGRESSIVE RENAL DISEASE	RENAL DISEASE			NOT SPECIFIED(TRACE)	E)		
RECTUM				TISSUE IS MISSING			

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 STUI	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 I DATE: 23-JAN-84	PRINTED: 14-MAR-86 PAGE: 17 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 78 (TON NO. 29) SEX: MALE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	ш.	DOSE GROUP: 2 SACRIFICE STUDY WEEK OF DEATH: 54 TE.	DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 350.00 (GMS)
<pre></pre>	1 I S S U E	OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	\$ >> / SPECIAL COMMENTS
MAMMARY GLANDS		TISSUE IS MISSING	
PITUITARY GLAND		(PRESENT)	

STUDY START DATE: 23-JAN-84	STUDY TYPE: CHRONIC/2	IIC/Z YR CARCINOGENIC
X: MALE DOSE GROUP: 2 : 359 STUDY WEEK OF DEATH:	SACRIFICE STATUS: FOUND DEAD 52 TERMINAL BODY WEIGHT:	373.00 (GMS)
G H T S >> ABSOLUTE ORGAN RELATIVE WEIGHT (GMS) BODY WE	ORGAN TO BRAIN ORGAN WEIGHT RATIO STATUS	
13.484 3.6150 % 2.826 0.776 % 0.070 0.0188 % 2.843 0.7622 % 5.518 1.794 % 2.029 0.2818 %	1.3928 OK 0.0345 OK 1.4012 HIGH 2.7196 HIGH 1.0000 OK 0.5180 HIGH	
GROSS ORGAN OBSERVATIONS >> KEYWORDS / PHRASES SEVERITY GROSS FREE-TEXT	COMMENTS	
ADHERED TO PERITONEAL WALL PRESENT VENTRAL ADHESION 2 WHITE FOCI GROWTH(S) / MASS(ES) PRESENT 2 MW UNITE AREA GROWTH(S) / MASS(ES) PRESENT 2 MW UNITE AND 1-2 ML DARK RED UN	VENTRAL ADHESION 2 X 2CM 2 MM WHITE AREA 2 X 3 CM FIRM MULTINODULAR DARK RED MOTTLED MASS 8 X 3 CM FIRM MULTINODULAR DARK RED MOTTLED FRICARDIAL SAC 1-2 ML DARK RED UNCLOTTED FLUID	MASS INVOLVING L SAC CONTAINED
C T I S S U E O B S E R V A T DISTRIBUTION (SI	T I O N S >> (SEVERITY) / SPECIAL COMMENTS	
ELIOMA (PRESENT)		
NOT SPECIFIED(MILD) LAR CONGESTION	MILD) (Present)	
NOT SPECIFIED (PRESENT)	
	SPECIFIED (SPECIFIED (PRESENT)

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84
ANIMAL NUMBER: 132 (TOX NO. 194) SEX: MALE DOSE OF DATE OF DEATH: 15-JAN-85 STUDY DAY OF DEATH: 359 STUDY	DOSE GROUP: 2 SACRIFICE STATUS: FOUND DEAD STUDY WEEK OF DEATH: 52 TERMINAL BODY WEIGHT: 373.00 (GMS)
C M I C R O S C O P I C T I S S U E TISSUE / HISTOPATHOLOGIC FINDINGS	OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
LIVERBILE DUCTULE EPITHELIAL HYPERPLASIA	. NOT SPECIFIED(MILD)
MAMMARY GLANDSHYPERTROPHY OF THE ACINAR TISSUE	. NOT SPECIFIED(TRACE)
EYES & OPTIC N	. NOT SPECIFIED(TRACE)

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER·344	P, PATH SE ISCHER-344	OF RESEARCH	STUDY STAR	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	. ANIMAL DATA REPORT NUMBER: GLP83009 5-JAN-84		PE: CHRONIC	PRINTED: 14-MAR-86 PAGE: 1 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC
ANIMAL NUMBER: DATE OF DEATH:	13; 28-JAN-85	ANIMAL NUMBER: 137 (TOX NO. 6) DATE OF DEATH: 28-JAN-85 STUDY DAY OF D	SEX: MALE DEATH: 372	DOSE GROUP: 3 STUDY WEEK OF	OUP: 3 SACRIFICE EEK OF DEATH: 54 TE	FICE STATUS: INTERIM SACRIFICE TERMINAL BODY WELGHT: 39	RIFI	CE 1 391.00 (GMS)
DATE	A STUDY	ORGAN WARE	I G H T S ABSOLUTE WEIGHT (ORGAN RI	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13 · 0CT · 85 13 · 0CT · 85 13 · 0CT · 85	630/90 630/90 630/90	LIVER KIDNEYS ADRENAL GLAND	· · · · · · · · · · · · · · · · · · ·	. 68 S	2.5036 % 0.6202 % 0.0161 %	4.9265 1.2204 0.0317	0 K	
13.0CT-85 13.0CT-85 13.0CT-85	630/90 630/90 630/90		, M	13 12 17		1.6170 0.5546 1.0000	H1GH LOW OK	
13.0CT-85	06/089	SPLEEN SPLEEN GROSSOR KEYWORDS/PHRASES	0.690 R G A N O B S	00 3 S E R V A SEVERITY	* *	0.3473 	H 0 1 H	
EYES & OPTIC N		IRREGULAR EYE SURF	FACE.	PRESENT	LEFT MILD; RIGHT MINIMAL	INIMAL		
TISSUE / HISTOPAT		<pre></pre>	S 1 L D 1 d	S U E	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	>> / SPEC1AL	COMMENTS	
HEART	HY				NOT SPECIFIED(TRACE)	(E)		
KIDNEYPROGRESSIVE RENAL DISEASE	RENAL DISE	ASE			NOT SPECIFIED(TRACF)	(F)		
PROSTATE	TATITIS	PROSTATITIS			NOT SPECIFIED(MILD)			
TESTES	TITIAL CELL HYPE	ERPLASIA			NOT SPECIFIED(TRACE)	(E)		

LETTERMAN ARMY INSTITUTE DIV OF RES SUPP, PATH SE SPECIES: RAT/FISCHER-344	LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	S	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	DIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 DATE: 23-JAN-84		YPE: CHRON	PRINTED: 14-MAR-86 PAGE: 2 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	9 -
ANIMAL NUMBER: 138 DATE OF DEATH: 28-JAN-85	Ē :	OX NO. 7) SEX: STUDY DAY OF DEATH: 3	MALE 72	DOSE GROUP: 3 SACRISTUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 401	RIM SACRIF	CE 1 400.00 (GMS)	
OAY/WEEK OF STUDY	<pre><< 0 R G A N EEK UDY ORGAN NAME</pre>	W E I G	H T S >> BSSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN		own6
13.0C1.85 630/90 13.0C1.85 630/90 13.0C1.85 630/90 13.0C1.85 630/90 13.0C1.85 630/90 13.0C1.85 630/90	LIVER KIDNEYS ADRENAL TESTES HEART BRAIN SPLEEN	GLANDS	10.801 2.452 0.071 3.166 0.999 1.988 0.661	2.7002 x 0.6130 x 0.0178 x 0.7915 x 0.2498 x 0.4970 x	5.4331 1.2334 0.0357 1.5926 0.5025 1.0000 0.3325	#91 #07 #07 #01		534
ORGAN NAME <<	C G R O S S O R G A KEYWORDS / PHRASES PROMINENT LOBULAR MARKI	G A	O B S E R V SEVERITY	A T I O N S >> GROSS FREE TEXT C	COMMENTS			:
TISSUE / HISTOPATHOLOGIC FINDINGS		0 1 d 0 0 s	TISSUE	OBSERVATIONS DISTRIBUTION (SEVERITY)	T O N S >> SEVERITY) / SPECIAL COMMENTS	OMMENTS		:
DUCTULE EPITHELIAL HYPERP BASOPHILIC	IVERBILE DUCTULE EPITHELIAL HYPERPLASIAFOCUS BASOPHILIC			NOT SPECIFIED(MODERATE) NOT SPECIFIED(TRACE)	RATE) E)			
IDNEYPROGRESSIVE RENAL DISEASE	SEASE	:		NOT SPECIFIED(TRACE)	E)			
ESTESINTERSTITIAL CELL HYPERPLASIA	PERPLASIA			NOT SPECIFIED(TRACE)	E)			
MAMMARY GLANDS				TISSUE IS MISSING				

STUDY NUMBER: GLP83009 STUDY NUMBER: GLP83009 STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84 SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344 STUDY DATE DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 1 DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 400.00 (GMS) 11SSUE / HISTOPATHOLOGIC FINDINGS DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
PITUITARY GLAND
AD SEBACIOUS

DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	S SUPP, PATH SE RAT/FISCHER-344	RV GP		STUDY START	STUDY STUDY T DATE: 23	NUMBER: JAN-84	DAIA REPORT GLP83009	STUDY	STUDY TYPE: CHROM	PRINTED: 14-MAR-86 PAGE: 4 CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 139 (Tox No. 8) DATE OF DEATH: 28-JAN-85 STUDY DAY	135: 28-JAN-85	(Tox No. 8) SEX	3) Y OF DEA	372	DOSE (STUDY	DOSE GROUP: 3 STUDY WEEK OF DEATH:	SACRIFICE 1: 54 T	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 32	ERIM SACRIF	1CE 1 323.00 (GMS)
DATE	DAY/WEEK OF STUDY	ORGANAM	.	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	AN	RELATIVE % OF BODY WEIGHT	300 300	ORGAN TO BRAIN	ORGAN	
13.0CT.85 13.0CT.85 13.0CT.85 13.0CT.85 13.0CT.85	630/90 630/90 630/90 630/90 630/90	LIVER KIDNEYS ADRENAL GL. TESTES HEART BRAIN	GLANDS	8.735 8.735 2.201 0.079 2.261 1.291		2.7043 % 0.6814 % 0.0245 % 0.7000 % 0.3997 %	;	4.9490 1.2470 0.0448 1.2810 0.7314	70 H H H H H H H H H H H H H H H H H H H	
13 · 0CT · 85	630/90	SPLEEN		0.616		0.1907 %		1.0000 0.3490	0K H I GH	
ORGAN NAME	* *	G R O S O R KEYWORDS / PHRASES	O R G	A N 0 B		A T T O N S >> Y GROSS FREE-TEXT	>> TEXT COMMENTS	118		
EYES & OPTIC N SKIN		IRREGULAR EYE SURFA	SURFACE	 ,	PRESENT PRESENT	BILATERAL THICKENED TI	TISSUE	;		
TISSUE / HISTOPATHOLOGIC FINDINGS	PATHOLOGIC	M 1 C R O S C O P FINDINGS	C 0 P 1	8 8 1 1 3	. n	OBSERV DISTRIF TION	A T I O N S	S >>) / SPECIAL	COMMENTS	
PARATHYROID SALIVARY GLAND						. TISSUE IS MI	MISSING			
HEART	:		•		•		D(TRACE)			
THYMUSSPLEENFIBROSIS CAPSULAR		CAPSULAR					MISSING			
LIVER			:		•	NOI SPECIFIED(TRACE)	D(TRACE)			

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP33009 STUDY START DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 139 (TOX NO. 8) SEX: MALE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 323.00 (GMS)
<pre><< M 1 C R O S C O P 1 C T I TISSUE / HISTOPATHOLOGIC FINDINGS</pre>	T I S U E O B S E R V A T I O N S >> T I S U E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
LIVERBILE DUCTULE EPITHELIAL HYPERPLASIA	
KIDNEYPROGRESSIVE RENAL DISEASE	
CECUM	TISSUE IS MISSING
RECTUM	TISSUE IS MISSING
COLON	TISSUE IS MISSING
SKELETAL MUSCLE	TISSUE IS MISSING
SCIATIC NERVE	TISSUE IS MISSING
PITUITARY GLAND	(PRESENT)

PA HE	17UTE TH SER' R-344	LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INDI STUDY START DA	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84		YPE: CHRONI	PRINTED: 14-MAR-86 PAGE: 6 STUDY TYPE: CHRONIC/2 YR CARCINGENIC	6 1.C
ANIMAL NUMBER: 144 10X DATE OF DEATH: 28 JAN-85 S	S S	140 FOX NO. TO SEX: MALE JAN-85 STUDY DAY OF DEATH: 372		DOSE GROUP: 3 SACR STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 390	RIM SACRIFI	CE 1 390.00 (GMS)	Bro
0 REKDY	· 🗽	R G A N W E 1 G	1 G H T S >> ABSOLUTE ORGAN	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN		wn63 :
630/90 630/90 630/90		LIVER KIDNEYS	10.194	0.6246 %	5.2197	701 101		8
630/90 630/90 630/90		TESTES HEART		0.8351 % 0.2713 %	1.6677	HIGH		
630/90 630/90		BRAIN SPLEEN	1.953 0.658		1.0000	0K HIGH		
<< G # KEYL	الد الدين	G R O S S O R (KEYWORDS / PHRASES	GAN OBSE	ERVATIONS >> EVERITY GROSS FREE-TEXT	COMMENTS			
9 ON	9 0	NO GROSS LESIONS RECOGNIZED		PRESENT				
HOLOGIC FIND	4 1 N 1	CONTINUES / HISTOPATHOLOGIC FINDINGS	1 C 1 1 S S D	E O B S E R V A D ISTRIBUTION	T 1 0 N S >> (SEVERITY) / SPECIAL	COMMENTS		
	:			TISSUE IS MISSING				
	:			TISSUE IS MISSING	(2			
THELIAL HY	: }	IVERBILE DUCTULE EPITHELIAL HYPERPLASIA		NOT SPECIFIED(TRACE)	(CE)			
PROGRESSIVE RENAL DISEASE	·Ψ			NOT SPECIFIED(TRACE)	ICE)			
	•			TISSUE IS MISSING				

TESTES

PRINTED: 14.MAR-86 PAGE: 7 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	SACRIFICE STATUS; INTERIM SACRIFICE 1: 54 TERMINAL BODY WEIGHT: 390.00 (GMS)	IAL COMMENTS
INDIVIDUAL ANIMAL DATA REPORT STUDY START DATE: 23-JAN-84	SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 1 ATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 390.00 (GMS)	T I S S U E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER 344	ANIMAL NUMBER: 140 (TOX NO. 16) SEX: MALE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	TISSUE / HISTOPATHOLOGIC FINDINGS

NOT SPECIFIED (TRACE)

TESTESINTERSTITIAL CELL HYPERPLASIA

Appendix K-50

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	Y INSTITUTE PP, PATH SE FISCHER-344	OF RESEARCH RV GP	INDIVIDUAL STUDY START DATE: 23	DIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 DATE: 23.JAN.84		YPE: CHRONIC	PRINTED: 14-MAR-86 PAGE: 8 STUDY TYPE: CHRONIC/2 VD GARGINGGENIG
ANIMAL NUMBER: DATE OF DEATH:	141 : 28-JAN 85	ANIMAL NUMBER: 141 (TOX NO. 17) DATE OF DEATH: 28.JAN.85 STUDY DAY OF DEA	SEX: MALE VIH: 372	DOSE GROUP: 3 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 41	RIM SACRIFIC	CE 1 (GMS)
DAFE	OAY/WEEK	ORGAN WE	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BOOT WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13 · 0CT · 85 13 · 0CT · 85	630/90			2.8526 %	6.3561	NOT CO	
13 · 0CT · 85 13 · 0CT · 85	630/90	ADRENAL GLANDS TESTES		0.0129 %	0.0288 1 7761	S O E	
13 · 0C1 · 85	630/90	HEART BRAIN	1.124	0.2689 %	0.5991	#01 #01	
13 · 0C1 · 85	630/90	SPLEEN	0.752		0.4009	HIGH	
ORGAN NAME	v V	G R O S S O R KEYWORDS / PHRASES	GAN OBSERV SEVERITY	A T 1 O N S >> GROSS FREE-TEXT	COMMENTS		
LIVER	· «	ADHERED TO DIAPHRAGM	PRESENT	ADHESION MEASURES	.75 X .75 CM		
TISSUE / HISTOPATHOLOGIC FINDINGS	ISTOPATHOLOGIC	M I C R O S C O P I FINDINGS	C TISSUE	OBSERVATIONS	>> / SPECIAL	COMMENTS	
LIVERBILE DUCTULE EPITHELIAL HYPER .FIBROSIS CAPSULAR NO COMPOUND	EPITHELIAL SULAR NO COI	FUER DUCTULE EPITHELIAL HYPERPLASIA FIBROSIS CAPSULAR NO COMPOUND		 NOT SPECIFIED(MODERATE) NOT SPECIFIED (PRESENT)	RATE) SENT)		
KIDNEY	RENAL DISEA	IDNEY -PROGRESSIVE RENAL DISEASE		NOI SPECIFIED(MILD)			
COAG GL				TISSUE IS MISSING			
TESTESINTERSTITIAL CELL HYPERPLASIA	CELL HYPERF	TITIAL CELL HYPERPLASIA		. NOT SPECIFIED(TRACE)	E)		

PRINTED: 14-MAR-86 PAGE: 9 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	SACRIFICE STATUS: INTERIM SACRIFICE 1 : 54 TERMINAL BODY WEIGHT: 418.00 (GMS)	CIAL COMMENTS
INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 1 TH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 418,00 (GMS)	S U E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 141 (10x No. 17) SEX: MALE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	<pre><< M 1 C R 0 S C 0 P I C T I S S U E 0 B S E R V A T I 0 N S >> TISSUE / HISTOPATHOLOGIC FINDINGS DISTRIBUTION (SEVERITY) / SPECIAL COMMFWTS</pre>

TISSUE IS MISSING

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP. FAIN SERV GP SPECIES: RATZEISCHER 344	1NST17UTE P, FAIB SE 1SCHER 344	OF RESEARCH RV GP	INDI STUDY START DA	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 START DATE: 23-JAN-84		YPE: CHRON	PRINTED: 14.MAR-86 PAGE: 10 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	142 28-JAN-85	ANIMAL NUMBER: 142 (ION NO. 18) SEX: MA DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372		DOSE GROUP: 3 SAC STUDY WEEK OF DEATH: 54	RIFICE STATU TERMINA	RIM SACRIFI	CE 1 377.00 (GMS)
DATE	DAY/WEEK OF STUDY	ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13 · 0¢1 · 85 13 · 0¢1 · 85	630/90 630/90	LIVER KIDNEYS	11.895	3.1552 %	5.7381	. X0	
13 OCT 85	630/90	ADRENAL GLANDS		0.0191 %	0.0347	¥ 8	
13-001-85	630/90	TESTES	3.368		1.6247	H1GH	
13 · ÚCT · 85	630/90	BRAIN	2.073	0.5499 %	0.5572	\$ 8	
13 - 001 - 35	630/90	SPLEEN	0.683		0.3295	H1GH	
ORGAN NAME	.	G R O S S O R G	GAN OB	. ≺			
		CICKURA LUNDER		SEVERIIY GROSS FREE-TEXT	COMMENTS		
EYES & OPTIC N.	_ ••	FOCAL CORNEAL OPACIT ADHEREL TO DIAPHRAGM	ITY PRESENT		LEFT LATERAL LOBE, 1CM DIAMETER.		
TISSUE / HISTOPATHOLOGIC FINDINGS	OPATHOLOGIC	M I C R O S C O P I FINDINGS	n s s i l o l	E O B S E R V A T 1 D X S D S S D ISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS	
LIVER	DUCTULE EPITHELIAL HYPERPL.	HYPERPLASIA		NOT SPECIFIED(MILD) NOT SPECIFIED (PRESENT)	LD) RESENT)		
KIDNEYPROGRESSIVE RENAL DISEASE	ENAL DISEA	.se		NOT SPECIFIED(MILD)	10)		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SER ISCHER-344	OF RESEARCH IV GP	I STUDY START	ND I	VIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 TE: 23.JAN-84	STUDY TYPE:		PRINTED: 14-MAR-86 PAGE: 11 CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	143 28-JAN-85	143 (Tox No. 19) 28-JAN-85 STUDY DAY OF DE	SEX: MALE EATH: 372	DOSE GROUP: STUDY WEEK	3 OF DEATH:	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 390	NIM SACRIF	1CE 1 390.00 (GMS)
DATE	A STUDY OF STUDY	ORGAN WAME	1 G H T S ABSOLUTE WEIGHT (2	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13.0CT-85 13.0CT-85 13.0CT-85 13.0CT-85	630/90 630/90 630/90 630/90	LIVER KIDNEYS ADRENAL GLANDS	10.068 2.373 5 0.060 3.260	జూగ్రం	2.5815 % 0.6085 % 0.0154 % 0.8359 %	5.3157 1.2529 0.0317 1.7212	100K	
13.0CT.85 13.0CT.85 13.0CT.85	630/90 630/90 630/90	HEART BRAIN SPLEEN	1.176 1.894 0.675	24 iv		0.6209 1.0000 0.3564	00K H1GH	
ORGAN NAME	· • • · • · • · • · • · • · • · • · • ·	G R O S S O R KEYWORDS / PHRASES	G A N O B	S E R V A SEVERITY	T 1 0 N S >> GROSS FREE-TEXT	COMMENTS		
WHOLE BODY	_	NO GROSS LESIONS RECOGNIZED	ECOGNIZED	PRESENT				
C M I C R C TISSUE / HISTOPATHOLOGIC FINDINGS	0PATHOLOGIC	M I C R O S C O P FINDINGS	3 1 1 2 1	SUE	E R V A BUTION	ONS >> ERITY) / SPECIAL	COMMENTS	
AORTA LIVER BILE DUCTULE EPITHELIAL HYPERPLASIA HEPATOCYTIC VACUOLIZATION	DUCTULE EPITHELIAL HY	HYPERPLASIA ON			TISSUE IS MISSING NOT SPECIFIED(MODERATE NOT SPECIFIED(TRACE)	ERATE) CE)		
KIDNEY	RENAL DISEA	SE		•	NOT SPECIFIED(TRACE)	CE)		
TESTES	TITIAL CELL HYPERPLASIA	PLASIA			NOT SPECIFIED(TRACE)	CE)		

DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 390.00 (GMS)	SPECIES: RAT/FISCHER 344	STUDY	PRINTED: 14-MAR-86 PAGE: 12 STUDY TYPE: CHRONIC/2 YR CARCINGENIC
<pre></pre>	143 (TON NO. 19) 28-JAN-85 STUDY DAY OF D	SEX: MALE DOSE GROUP: 3 SACRIFIC DEATH: 372 STUDY WEEK OF DEATH: 54	E STATUS: INTERIM SACRIFICE 1 TERMINAL BODY WEIGHT: 390.00 (GMS)
	<pre><< M I C R O S C O P TISSUE / HISTOPATHOLOGIC FINDINGS</pre>	O I C T I S S U E O B S E R V A T I O DISTRIBUTION (SEVERI	N S >> TY) / SPECIAL COMMENTS

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	/ INSTITUTE PP, PATH SEI :ISCHER-344	OF RESEARCH RV GP	INDIVIDUAL STUDY START DATE: 23	DIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 DATE: 23.JAN.84	T STUDY TYPE:	CHRONI	PRINTED: 14-MAR-86 PAGE: 13 C/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	28-1/	144 (TOX NO. 21) AN-85 STUDY DAY OF DE	SEX: MALE ATH: 372	DOSE GROUP: 3 SACRIFICE STUDY WEEK OF DEATH: 54 T	FICE STATUS: INTERIM SACRIFICE TERMINAL BODY WEIGHT: 38	IM SACRIFIC	1 6.00
DATE	OAY/WEEK OF STUDY	ORGAN WE	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13 · OCT · 85 12 · NOV · 85 13 · OCT · 85	630/90 660/95 630/90	LIVER KIDNEYS ADRENAL GLANDS		2.8256 % 0.6500 % 0.0127 %	5.6251 1.2940 0.0253	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
13 · 0¢ 1 · 85 13 · 0¢ 1 · 85 13 · 0¢ 1 · 85 13 · 0¢ 1 · 85	630/90 630/90 630/90 630/90	TESTES HEART BRAIN SPLEEN	3.091 1.282 1.939 0.752	0.8008 % 0.3321 % 0.5023 % 0.1948 %	1.5941 0.6612 1.0000 0.3878	H1GH OK H1GH	
ORGAN NAME	*	G R O S S O R (KEYWORDS / PHRASES	GAN OBSERV SEVERITY	A T 1 O N S >> GROSS FREE-TEXT	COMMENTS		
EYES & OPTIC N		IRREGULAR EYE SURFAC	CE. PRESENT	BILATERAL LINEAR INDENTATION OF	INDENTATION OF CORNEA	EA	
TISSUE / HISTOPATHOLOGIC FINDINGS	PATHOLOGIC	M I C R O S C O P I FINDINGS	C TISSUE	O B S E R V A T I DISTRIBUTION (SEVE	(SEVERITY) / SPECIAL CO	COMMENTS	
ESOPHAGUS				S :			
LIVER BILE DUCTULE -HEPATITIS	EPITHELIA'	IVERBILE DUCTULE EPITHELIA' HYPERPLASIAHEPATITIS		FISSUE IS MISSING NOT SPECIFIED(MILD) NOT SPECIFIED(TRACE)	E)		
KIDNEYPROGRESSIVE RENAL DISEASE	RENAL DISEA	SE		NOT SPECIFIED(TRACE)	E)		
TESTESINTERSTITIAL CELL HYPERPLASIA	CELL HYPER	PERPLASIA		. NOT SPECIFIED(MILD)			

SPECIES: RAI/FISCHER: 3.4	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 144 (TOX NO. 21) SEX: MAL DATE OF DEATH: 28 JAN-85 STUDY DAY OF DEATH: 372	· · · · ·	DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 386.00 (GMS)
CONTINUE / HISTOPATHOLOGIC FINDINGS	3 N S S I L S D E	E O B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
SCIATIC NERVE		TISSUE IS MISSING
BONE, FEMUR		TISSUE IS MISSING

SPECIES: RAT/FISCHER-344	1 SCHER - 344		STUDY START DATE: 23-JAN-84		STUDY	STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	CARCINOGENI
ANIMAL NUMBER: DATE OF DEATH:	BER: 145 AIH: 28-JAN-85	ANIMAL NUMBER: 145 (TOX NO. 23) DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEA	SEX: MALE DOSE EATH: 372 STUDY	DOSE GROUP; 3 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 43	0.00	(GMS)
DATE		O R G A N W E I	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13 · 0CT · 85	630/90		11.776	2.7386 %	6.3108	MO1	
13 · 0C1 · 85	630/90	KIDNETS ADRENAL GLANDS	0.087		0.0466	H1GH	
13 · 0CI · 85	630/90		2.596		1.3912	OK.	
13 · 0C1 · 85 13 · 0C1 · 85 13 · 0C1 · 85	630/90 630/90 630/90	HEAKI BRAIN SPLEEN	1.157 1.866 0.716		1.0000 0.3837	LOW LOW	
ORGAN NAME	* ⁻	G R O S S O R G KEYWORDS / PHRASES	GAN OBSERV SEVERITY	A T I O N S >> GROSS FREE-TEXT	COMMENTS		
WHOLE BODY	_	NO GROSS LESIONS RECOGNIZED	COGNIZED PRESENT				
<pre></pre>	OPATHOLOGIC	M I C R O S C O P I	C TISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS	
PARATHYROID .				. TISSUE IS MISSING			
ESOPHAGUS				TISSUE IS MISSING			
HEART				NOT SPECIFIED(MILD)	(0		
THYMUS				TISSUE IS MISSING			
LIVERBILE DUCTULE EPITHELIAL HYPERPLASIA .HEPATITIS	DUCTULE EPITHELIAL HYPERP 171S	L HYPERPLASIA		 NOT SPECIFIED(MILD) NOT SPECIFIED(TRACE)	D) CE)		
KIDNEY				:			

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 145 (FOX NO. 23) SEX: MALE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 1 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 430.00 (GMS)
ISSUE / HISTOPATHOLOGIC FINDINGS	U E O B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
PROGRESSIVE RENAL DISEASE	NOT SPECIFIED(M1LD)
TESTES	NOT SPECIFIED(TRACE)
1LEUM	718SUE 18 MISSING
SCIATIC NERVE	TISSUE IS MISSING
MAMMARY GLANDS	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PAIH SER ISCHER-344	OF RESEARCH RV GP	IND STUDY START D	INDIVIDUAL ANIMAL DATA REP STUDY NUMBER: GLP83009 T DATE: 23-JAN·84	REPORT 009 STUDY TYPE:	CHRONI	PRINTED: 14-MAR-86 PAGE: 17 C/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	146 28-JAN-85	27) AY OF D	SEX: MALE EATH: 372	DOSE GROUP: 3 STUDY WEEK OF DEATH:	SACRIFICE STATUS: INTERIM SAC 54 TERMINAL BODY WEIGHT:	NIM SACRIFICE 1	00 (GMS)
DATE		ORGAN NAME	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	W RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
13.0CT.85 13.0CT.85 13.0CT.85	630/90 630/90 630/90	LIVER KIDNEYS ADRENAL GLANDS	10.731 2.568 0.080		5.9026	. 7501 . 701 	
13 · 0CT · 85 13 · 0CT · 85 13 · 0CT · 85 13 · 0CT · 85	630/90 630/90 630/90 630/90	TESTES HEART BRAIN SPLEEN	3.153 1.086 1.818 0.651	0.8341 % 0.2873 % 0.4810 % 0.1722 %	1.7343 0.5974 1.0000 0.3581	HIGH COM NIGH HIGH	
ORGAN NAME	¥ · ¥	G R O S S O R G KEYWORDS / PHRASES	A N O B	R V A I I O N S RIITY GROSS FREE-I	S EXT COMMENTS		
TISSUE / HISTOPATHOLOGIC FINDINGS	** ** ********************************	M I C R O S C O P I FINDINGS	0 S 1 I S 0 D	E O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS	
ESOPHAGUS	:			TISSUE IS MIS	MISSING		
LIVERBILE OUCTULE EPITHELIAL HYPERPLASIAEPATITIS	OUCTULE EPITHELIAL HYPERPLA ITIS	HYPERPLASIA		NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	(TRACE) (TRACE)		
KIDNEY PROGRESSIVE RENAL DISEASE	ENAL DISEASE	se		NOT SPECIFIED(TRACE)	(TRACE)		
TESTES -14TERSTITIAL CELL HYPERPLASIA	CELL HYPERF	PLASIA		NOT SPECIFIED(TRACE)	(TRACE)		

LEFFERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAI/FISCHER-344 STUDY START DATE: 23-JAN-84	PRINTED: 14-MAR-86 PAGE: 18 STUDY TYPE: CHRONIC/2 YR CARCINGENIC	
ANIMAL NUMBER: 146 (TOX NO. 27) SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 1 DATE OF DEATH: 28 JAN-85 STUOY DAY OF DEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 378.00 (GMS)	SACRIFICE STATUS: INTERIM SACRIFICE 1 54 TERMINAL BODY WEIGHT: 378.00 (GMS)	Br
COPIC TISSUE / HISTOPATHOLOGIC FINDINGS SCOPIC TISSUE OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS		own6
MAMMARY GLANDS TISSUE IS MISSING) SU	50
EYES & OPTIC N		

SPECIES: RAT/FISCHER-344	1 SCHER - 344		STUDY START DATE: 23-JAN-84	23-JAN-84	1 10018	SIGGI ITPE: CHKONIC/2 IN CANCINCACING	CANCINGER
ANIMAL NUMBER:	205 28-JAN-85	ANIMAL NUMBER: 205 (TON NO. 226) DATE OF DEATH: 28-JAN-85 STUDY JAY OF DE.	SEX: FEMALE DOSE DEATH: 372 STUDY	DOSE GROUP: 1 SACR STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 23	RIM SACRIFICE 2 WEIGHT: 238.00	(GMS)
DATE	A STUDY	O R G A N W E	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS	
14-0CT-85 14-0CT-85	631/91	OVARIES LIVER	0.089	0.0374 %	0.0542	OK HIGH	
14 · 0CT · 85	631/91	KIDNEYS	1.767		1.0755	ок н16н	
14 - 0CT - 85 14 - 0CT - 85	631/91			0.3294 %	0.4772	OK OK	
14-0CT-85 14-0CT-85	631/91 631/91	BRAIN Spleën	1.643 0.473	0.6903 % 0.1987 %	1.0000	H I GH	
ORGAN NAME		NEIMORDS / FIRASES					
EYES & OPTIC N EYES & OPTIC N LIVER		IRREGULAR EYE SURFACE. CORNEAL DISCOLORATION. ADHERED TO DIAPHRAGM AND	ICE. MILD ON. PRESENT IM AND STOMACH PRESENT		RIGHT EYE RIGHT EYE, YELLOW/BROWN AND PROTRUDES,INVOLVES INVOLVES PERITONEAL WALL.	DES, INVOLVES LENS	
<pre><</pre>		M I C R O S C O P	I C T I S S U E	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	/ SPECIAL	COMMENTS	
LIVER CAPSULAR FOR	EIGN GRANU EPITHELIA	IVER		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MILD)	PRESENT) ILD)		
URINARY BLADDER				TISSUE IS MISSING	פ		
EYES & OPTIC N.		YES & OPTIC N.		CECAUTION TOWN	(H) (H)		
TALM MINE	RALIZALIUN	_		101 STECTION	, , ,		

LETTERMAN ARMY INSTITUTE OF RESEARCH OIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	/ INSTITUTE PP, PATH SER	OF RESEARCH IV GP		IND STUDY START D	INDIVIDUAL ANIMAL DATA REPOR STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	DR I	PRI	PRINTED: 14-MAR-86 PAGE: 2 STUDY IYPE: CHRONIC/2 YR CARCINGGENIC
ANIMAL NUMBER: 206 (TOX NO. 230) DATE OF DEATH: 28 JAN-85 STUDY DAY OF	206 28 JAN - 85	(Tox No. 23 study DAY	 DEA	SEX: FEMALE TH: 372	DOSE GROUP: 1 SACI	SACRIFICE STATUS: INTERIM SAC 54 TERMINAL BODY WEIGHT:	RIFI	CE 2 215.00 (GMS)
DATE	A STUDY	O R G A N ORGAN NAME		G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	N RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14 · 001 · 85 14 · 001 · 85 16 · 001 · 85	631/91 631/91 631/91 631/91	ES -	GLANDS	0.075 6.235 1.549 0.069		0.0420 3.4950 0.8683 0.0387	00 00 00 00 00 00 00 00 00 00 00 00 00	
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91 631/91 631/91	HEART BRAIN SPLEEN		0.838 1.784 0.434	0.3898 % 0.8298 % 0.2019 %	0.4697 1.0000 0.2433	0K 0K H1GH	
CRGAN NAME	, v	G R O S S O R KEYWORDS / PHRASES ADHERED TO DIAPHRA(N O B	S E R V A T I O N S >> SEVERITY GROSS FREE-TEXT COMMENTS PRESENT ADHESION INVOLVES INTESTINES	AND	OMENTUM.	
TISSUE / HISTOPATHOLOGIC FINDINGS	/ HISTOPATHOLOGIC	: ^	0 1 d 0 0 S	S S I L	U E O B S E R V A T DISTRIBUTION (SI	(SEVERITY) / SPECIAL	COMMENTS	
HEART					NOT SPECIFIED(TRACE	RACE)		
LIVER	EPITHELIAL	CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA -HEPATITIS	10N		NOT SPECIFIED (PRESE NOT SPECIFIED(MILD) NOT SPECIFIED(TRACE)	(PRESENT) MILD) TRACE)		
PANCREAS		118			NOT SPECIFIED(TRACE)	RACE)		
STOMACH	ATED INFLAM	COMPOUND RELATED INFLAMMATORY REACTION	NO		NOT SPECIFIED (PRESENT)	PRESENT)		

DIV OF RES SUPP, PAIH SERV GP SPECIES: RAT/FISCHER-344	.Р. РАТН SE 1SCHER 344	ERV GP	STUDY NUMBER: STUDY START DATE: 23-JAN-84	STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	STUDY TYPE:		PAGE: 1 CHRONIC/2 YR CARCINOGENIC
	MBER: 200	(Tox No. 236) Study day of DEA	FEMALE 363	DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 52	SACRIFICE STATUS: FOUND DEAD 52 TERMINAL BODY WEIGHT	DEAD EIGHT:	248.00 (GMS)
DATE	CS C DAY/WEEK DATE OF STUDY	G A N W E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91 631/91 631/91	OVARIES LIVER KIDNEYS	0.198 14.778 1.824		0.1106 8.2513 1.0184	H1GH H1GH OK	
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91 631/91 631/91 631/91	ADRENAL GLANDS HEART BRAIN SPLEEN	0.111 1.074 1.791 7.061	0.0448 % 0.4331 % 0.7222 % 2.8472 %	0.0620 0.5997 1.0000 3.9425	H1GH OK OK H1GH	
SPLEEN PITUITARY GLAND LIVER PERITONEAL CAV. PERITONEAL CAV.	e : :	ENLARGED (SPLENOMEGALY) CYST(S) ADHERED TO DIAPHRAGM. FLUID-FILLED SMALL INTESTINE	PRESENT PRESENT PRESENT PRESENT PRESENT	ENLARGED, FRIABL CYSTIC, BLACK, A CONTAINED CLOTTE ADHERED TO PERIT APPROX 40 CM FRO ANTERIOR MEDIAST	E, RUPTURED PPROX 3MM D BLOOD ONEAL CAVITY, RIGHT M STOMACH INAL, RED	SIDE, RE	RED, FRIABLE;
TISSUE / HISTOPA	HISTOPATHOLOGIC FINDING	C M I C R O S C O P I C HISTOPATHOLOGIC FINDINGS	1 1 S S C E	OBSERVATI DISTRIBUTION (SEV	T 1 0 N S >> (SEVERITY) / SPECIAL COMMENTS	DAMENTS	
N N	AR CELL LE	ONUCLEAR CELL LEUKEMIA		(PRESENT)			
LIVEK -CAPSULAR FOR	EIGN GRANL	- CAPSULAR FOREIGN GRANULOMATOUS REACTION		NOT SPECIFIED (PRESENT)	ESENT)		

PITUITARY GLAND

PRINTED: 14.MAR.86 PAGE: 2 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC	248.00 (GMS)	
STUDY TYPE: CHRC	SACRIFICE STATUS: FOUND DEAD: 52 TERMINAL BODY WEIGHT:	O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: FOUND DEAD ATH: 363 STUDY WEEK OF DEATH: 52 TERMINAL BODY WEIGHT: 248.00 (GMS)	J E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPEC
STUDY START DA	(b) SEX: FEMALE DO OF DEATH: 363	OPICTISSUE
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 208 (FOX NO. 236) SEX: FEM DATE OF DEATH: 19 JAN-85 STUDY DAY OF DEATH: 363	<pre>11SSUE / HISTOPATHOLOGIC FINDINGS</pre>
LETTER DIV OF SPECIE	ANIMAL DATE O	I I S S U E

PITUITARY GLAND ·B· ADENOMA

beess - Courses and Course and Courses and Course and Courses and

LETTERMAN ANMY INSTITUTE OF RESEARCH OLV OF RES SUPP. PATH SERV OF SPECIESE RAIZFISCHER: 544	INSTITUTE P, PATH St ISCHER: 544		INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	VIDUAL ANIMAL DATA REPOR STUDY NUMBER: GLP83009 TE: 23-JAN-84	_	PRINTED: 14-MAR-86 PAGE: 3 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	D: 14-MAR-86 E: 3 CARCINOGENIC
ANIMAL NUMBER: 209 DATE OF STATE: 28 JAN-85	28 - NAU - 85	(LOS NO. 237) STUDY DAY OF DEA	SEX: FEMALE DOSF GIATH: 3/2 STUDY	DOSE GRUUP: 1 SACRI STUDY WELK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 232.	RIM SACRIFICE 2 METGHT: 232.00	(GMS)
DATE	DAY/W: LA OF STUDY	U R G A N W E B	G H T S ABSÖLUTE ORGAN UETGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
	651/91	OVARIES	0.105	0.0453 % 3.0502 %	0.0626		
14 OCT 85	051/91	KIDNETS ADRENAL GLANDS	0.079 0.079		0.0471	H 16H	
14 - 0(11.85 14 - 0(11.85 14 - 0(11.85	651/91 651/91 631/91	HEAK! BRAIN SPLEEN	1.678	0.7233 % 0.1970 %	1.0000 0.2723	ок И16н	
ORGAN NAME	**	G R O S S O R G KEYWURDS / PHRASES	AN OBSERVI SEVERITY	A 1 1 0 N S >> GROSS FREE-TEXT C	COMMENTS		
EYES & OFFIC N.	,	FOCAL CORNEAL OPACITY ADHERED TO DIAPHRAGM.	PRESENT PRESENT	PINPOINT INVOLVES OMENTUM AND PERITONEAL	AND PERITONEAL WALL	ن	
1155UE / HISTOPATHOLOGIC FINDINGS	PATHOLOGIC	M I C R O S C O P I FINDINGS	3 0 8 8 1 1 3	OBSERVATIONS DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENIS	
PARATHYROID .				. TISSUE IS MISSING			
EXORBITAL LACKIM				TISSUE IS MISSING			
AORTA				TISSUE IS MISSING			
LIVER	EIGN GRAND EPITHELIA	TVER		NOT SPECIFIED (PRESENT) NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	ESENT) CE) CE)		

KIDNEY

ELIERMAN ARMY INSTITUTE OF PESEARCH TV OF RES SUPP, PATH SERV GP STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA PEPORT STUDY NUMBER: GLP85cc. T DATE: 23.JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINGENIC	
NIMAL NUMBER: 209 ([OB NO. 257] SEX: FEMALE DOSE GRATE OF DEATH: 372 STUDY WATE UP DEATH: 372	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 232.00 (GMS)	Br
ISSUE / HISTOPATHOLOGIC FINDINGS	O B S E R V A T T O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	own6
PROGRESSIVE RENAL DISEASE	NOT SPECIFIED(TRACE)	556
AMMARY GLANDS TISSUE IS MISSING	TISSUE IS MISSING	
ES & OPTIC N. CORNEAL MINERALIZATION		

SPECTEST RAI/FISCHER 344	ISCHER 544		STUDY START	DATE: 25-JAN-84	STUDY TYP	PAGE: 1 STUDY IYPE: CHRONIC/2 YR CARCINOGENIC	E: I CARCINOGENI
ANIMAL NOMBEREDAL OF DEATHE	211 23 - JAN - 85		SEX: FEMALE TH: 372	GROUP: 1 WEEK OF DEATH:	RIFICE STATU TERMINA	M SACRIFICE 2	(SWS)
6ATE	DAY/WLEK OF STUDY	U R G A N W E I	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	N RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO		
14 · 0.0.7 · 85 14 · 0.0.1 · 85 14 · 0.0.1 · 85 14 · 0.1 · 85 14 · 0.0.1 · 85 14 · 0.0.1 · 85	651/91 651/91 651/91 651/91 651/91 651/91 651/91	OVARIES LIVER KIDNEYS ADRENAL GLANDS HEART BRAIN SPLEEN	0.096 7.129 1.672 0.112 0.721 1.719 0.552	0.0414 % 3.0728 % 0.7207 % 0.0483 % 0.3108 % 0.7409 % 0.2379 %	0.0558 4.1472 0.9727 0.0652 0.4194 1.0000	00 K 00 K 00 K 00 K 00 K 00 K	
ORGAN NAME EYES A OPTIC N. LIVER STOMACH CECUM	ÿ	GROSSORGAN KEYWORDS / PHRASES IRREGULAR EYE SURFACE. ABSCESS(ES) GROWTH(S) / MASS(ES) MASS(ES) ADHERENT TO OTHER ORGANS	O B S S S S S S S S S S S S S S S S S S	SERVATIONS >>> SEVERITY GROSS FREE-TEXT TRACE BILATERAL. PRESENT SLIGHTLY RAISED PRESENT 1CM DIAMETER ON PRESENT 2-5MM NEAR JUNCT PRESENT 2-5MM NEAR JUNCT PRESENT ADHERED TO COLON	GROSS FREE-TEXT COMMENTS BILATERAL. SLIGHTLY RAISED ON DIAPHRAMATIC SURFACE, 3MM 3/4 x 1/2 x 1/2cm Yellow Caseous Material. TCM DIAMETER ON GREATER CURVATURE. 2.5MM NEAR JUNCTION OF CECUM AND COLON. ADHERED TO COLON	ICE, 3MM DIAMETER. RIAL. IN.	CONTAINS
TISSUE / HISTOPATHOLOGIC FINDINGS	STOPATHOLOGIC FINDINGS	A M I C R O S C O P I MISTOPATHOLOGIC FINDINGS	7 S S - L	E O B S E R V A T 1 O N S DISTRIBUTION (SEVERITY)	T 1 0 N S >> SEVERITY) / SPECIAL COMMENTS	MENTS	
CAPSULAR FOREIGN GRANULOMATOUS REAC BILE DUCTUIL EPTIHELIAL HYPLRPLASIA KIDNEY	IGN GRANDL EPTTHELTAL	CAPSULAR FOREIGN GRANULOMATOUS REACTION BILE DUCTULE EPITHELIAL HYPERPLASIA IDNEY PROGRESSIVE RENAL DISEASE		NOT SPECIFIED (PRESENT) NOT SPECIFIED (TRACE) NOT SPECIFIED (TRACE)	RESENT) ACE) ACE)		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	PRINTED: 14-MAR-86 PAGE: 2 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC
ANIMAL NUMBER: 211 (TOX NO. 241) SEX: FEM DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	ALE DOSE GROUP: 1 STUDY WEEK OF DEATH:	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 232.00 (GMS)
<pre><< M 1 C R 0 S C 0 P I TISSUE / HISTOPATHOLOGIC FINDINGS</pre>	C T I S U E O B S E R V A T I DISTRIBUTION (SEVE	O N S >> RITY) / SPECIAL COMMENTS
STOMACH -COMPOUND RELATED INFLAMMATORY REACTION	NOT SPECIFIED (PRESENT)	
MAMMARY GLANDS	SALESCIA OF HUSSII	

DIV OF RES SUPP, PATH SERV GP SPECIES: RAI/FISCHER-344	P, PATH SE ISCHER-344		STUDY STUDY STARI DATE: 2	STUDY NUMBER: GLP85009 DATE: 23-JAN-84		PAGE: 3 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH: 28-JAN	212 28-JAN-85	ANIMAL NUMBER: 212 (TOX NO. 258) SEX: FE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	MALE	DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 239.	RIM SACRIFICE 2 JEIGHT: 239.00 (GMS)
DATE	A C C C C C C C C C C C C C C C C C C C	ORGAN WEIGHT ABSO	H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91 631/91 631/91	OVARIES LIVER KIDNEYS	0.093 8.690 1.589		0.0552 5.1573 0.9430	. 33
14-0CT-85 14-0CT-85 14-0CT-85 14-0CT-85	631/91 631/91 631/91 631/91	ADRENAL GLANDS HEART BRAIN SPLEEN	0.081 0.891 1.685 1.214	0.0339 % 0.3728 % 0.7050 % 0.5079 %	0.0481 0.5288 1.0000 0.7205	H1GH OK OK H1GH
LIVER		ADHERED TO DIAPHRAGM.	PRESENT		AL WALL WITH A FEW	J SMALL ADHESIONS TO SMALL
EYES & OPTIC N. SPLEEN JEJUNUM		FOCAL CORNEAL OPACITY ENLARGED (SPLENOMEGALY) FIBROUS ADHESIONS (TAGS) DILATATION	PRESENT MODERATE PRESENT MODERATE	INTESTINES. 1MM DIAMETER, BILATERAL. ABOUT TWICE NORMAL SIZE. 4CM LENGTH ADHERED TOGET 10CM FROM JEJUNAL LESION	ATERAL. IL SIZE. IDGETHER IN LOOP LESION.	S 30CM FROM STOMACH.
C M I C R I TISSUE / HISTOPATHOLOGIC FINDINGS	 ** PATHOLOGIC	M I C R O S C O P I C FINDINGS	TISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS
PARATHYROID				. TISSUE IS MISSING		
LUNGS	NODULE	UNGSHYPERPLASTIC NODULE		NOT SPECIFIED(TRACE)	(CE)	
THYMUS				. TISSUE IS MISSING		
SPLEEN						

The Control of the State State of the State

STUDY STAR	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 212 (TOX NO. 258) SEX: FEMALE DOSE GROUP DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY WEEK	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 239.00 (GMS)
TISSUE / HISTOPATHOLOGIC FINDINGS OF I C T I S S U E O D I C T I S S U E O D I C T I S U E O D I C T	OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
SPLEEN	NOT SPECIFIED(MODERATE)
LYMPHOID HYPERPLASIA NO	NOT SPECIFIED(MODERATE)
CAPSULAR FOREIGN GRANULOMATOUS REACTION BILE DUCTULE EPITHELIAL HYPERPLASIA HEPATITIS	T SPECIFIED (PRESENT) T SPECIFIED(MILD)
FOCUS BASOPHILIC HEPATOCYTIC VACUOLIZATION NOT	SPECIFIED(TRACE) SPECIFIED(TRACE) SPECIFIED(TRACE)
JEJUNUM - COMPOUND RELATED INFLAMMATORY REACTION	T SPECIFIED (PRESENT)
SKIN IIS	TISSUE IS MISSING
MAMMARY GLANDS TIS	TISSUE IS MISSING

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	OF RESEARCH RV GP	INDIV S STUDY START DAT	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23.JAN.84	STUDY	FCHRONIC
ANIMAL NUMBER: DATE OF DEATH: 28-J	213 28-JAN-85	59) of D	SEX: FEMALE EATH: 372	DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE Z 54 TERMINAL BODY WEIGHT: 224.	M SACRIFICE 2 1GHT: 224.00 (GMS)
DATE	DAY/WEEK OF STUDY	O R G A N W E	I G H T S ABSOLUTE WEIGHT (RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14.0CT-85 14.0CT-85 17.0CT-85	631/91	OVARIES LIVER	0.102	0.0455 % 2.9661 % 0.7272 %	3.9151	LON LON OK
14 · 0C1 · 85 14 · 0C1 · 85 14 · 0C1 · 85 14 · 0C1 · 85	631/91 631/91 631/91 631/91	KIDNETS ADRENAL GLANDS HEART BRATIN		0.0348 % 0.3362 % 0.7576 % 0.3362 % 0.7576 % 0.7576 %	0.5537 0.0460 0.4437 1.0000	11 GH 11 GH 12 GH 13 GH 14 GH 15 GH 16 GH
ORGAN NAME	*	G R O S S O R	G A N O B S E	A T I O N S >> GROSS FREE-TEXT	COMMENTS	
EYES & OPTIC N EYES & OPTIC N LIVER UTERUS		FOCAL CORNEAL OPACITY OCCULAR DISCHARGE ADHERED TO DIAPHRAGM.	TTY PRESENT PRESENT SM. PRESENT	ENT BILATERAL ENT 2 X 5CM AREA		
C M I C R C TISSUE / HISTOPATHOLOGIC FINDINGS	 ** PATHOLOGIC	M I C R O S C O P FINDINGS	1 0 0 0 1	E O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS
HEART				TISSUE IS MISSING	ű	
LIVER	FICTOR CRAND EPITHELIA	IVER -CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA -FOCUS BASOPHILIC			SSENT) CE) CE)	
KIDNEY	:			:		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAI/FISCHER-344 SPECIES: RAI/FISCHER-344	DATA (
ANIMAL NUMBER: 213 (TOX NO. 259) SEX: FEMALE DOS DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STU	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 224.00 (GMS)
TISSUE / HISTOPATHOLOGIC FINDINGS	O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
PROGRESSIVE RENAL DISEASE	NOT SPECIFIED(TRACE)
JEJUNUM	IISSUE IS MISSING
RECTUM	TISSUE IS MISSING
MAMMARY GLANDS	TISSUE IS MISSING

LETTERMAN ARMT INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	r INSTITUTE PP, PATH SE :ISCHER-344	UT KESEAKUN RV GP	STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DAIA REFURI STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	7 7 ARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	214 (28-JAN-85	Tox No. 262) STUDY DAY OF DEA	SEX: FEMALE DOSE	DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SAC 54 TERMINAL BODY WEIGHT:	SACRIFICE 2 HT: 210.00	(GMS)
DATE	C C C C C C C C C C C C C C C C C C C	ORGAN WEI	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14-0CT-85	631/91	OVARIES	0.098	% 2970°0 % 2×67°£	0.0543		
14 - 001 - 85	631/91	KIDNEYS	1.504		0.8328	ŏ	
14-001-85	631/91	ADRENAL GLANDS	0.062		0.0343	HIGH	
14 - 001 - 63	631/91	- X X X X X X X X X X X X X X X X X X X	1.806		1.0000	ž ŏ	
14 · 0CT · 85	631/91	SPLEEN	0.491		0.2719	нэтн	
ORGAN NAME	*	G R O S S O R G . KEYWORDS / PHRASES	AN OBSERV SEVERITY	A T I O N S >> GROSS FREE-TEXT	COMMENTS		
LIVER EYES & OPTIC N	· 2	ADHERED DIAPHRAGM & PE IRREGULAR EYE SURFACE.	RITONEUM.				
<pre></pre>	>> DPATHOLOGIC	1 4 0 3 8 0	C 1 1 8 8 U E	OBSERVATIONS DISTRIBUTION (SEVERITY)	,	COMMENTS	
ESOPHAGUS	:			TISSUE IS MISSING			
CAPSULAR FOREIGN -BILE DUCTULE EPI -HEPATITIS -FOCUS BASOPHILIC	REIGN GRANUL	-CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA -HEPATITIS -FOCUS BASOPHILIC		NOT SPECIFIED (PRESENT) NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	ESENT) CE) CE)		
10000				INTOOLM OF BUSSING			

ں ۔				
PRINTED: 14-MAR-86 PAGE: 8 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 210.00 (GMS)	E O B S E R V A T I D N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS		
INDIVIDUAL ANIMAL DATA STUDY NUMBER: GLP83 START DATE: 23-JAN-84	ALE DOSE GROUP: 1 STUDY WEEK OF DEATH:	0 8 8 1 1 8 5 0	TISSUE IS MISSING	
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 214 (TOX NO. 262) SEX: FEM. DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	TISSUE / HISTOPATHOLOGIC FINDINGS	RECTUM	EYES & OPTIC N

DIV OF RES SUPP, PATH SERV GP SPECIES: RAI/FISCHER-344	Р, РАТН SE 1SCHER-344		STUDY NUMBER: STUDY START DATE: 23.JAN.84	STUDY NUMBER: GLP83009 TE: 23-JAN-84	STUDY T	PAGE: Y STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	28-1	(Tox No. 263) STUDY DAY OF DEA	SEX: FEMALE DOSE (DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 199.	RIM SACRIFICE 2 JEIGHT: 199.00 (GMS)
DATE	DAY/WEEK OF STUDY	WE I G	H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14 · 0CT · 85 14 · 0CT · 85	631/91	OVARIES	0.121	3.3090 %	0.0699	. X
14 · 0CT · 85 14 · 0CT · 85	631/91	KIONEYS Adrenai Glands	1.482		0.8562	0K H1GH
14 · 0CT · 85	631/91		0.712		0.4113	96
14-001-85	631/91	SPLEEN	0.452		0.2611	нден
ORGAN NAME	· •	GROSS ORGA KEYWORDS/PHRASES	N OBSERV SEVERITY	A I I O N S >> GROSS FREE-TEXT	COMMENTS	
EYES & OPTIC N. SPLEEN LIVER		FOCAL CORNEAL OPACITY PROMINENT FIBROUS CAPSULE FIBROUS ADHESIONS (TAGS)	PRESENT LE TRACE) PRESENT	RIGHT EYE, SEVERAL MULTIPLE ADHESIONS OF THE		INTESTINES, LIVER AND OMENTUM.
C M I C R I I I SSUE / HISTOPATHOLOGIC FINDINGS	 PATHOLOGIC	M I C R O S C O P I C FINDINGS	1 I S S U E	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS
LIVER	EIGN GRANU VACUOLIZAT	IVER		NOT SPECIFIED (PRESENT NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	ESENT) CE) CE)	
K TONE Y						
ALUNET	DENAI DISE	· · · · · · · · · · · · · · · · · · ·		NOT SPECIFIED(MILD)	(0	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	Y INSTITUTE PP, PATH SEI FISCHER-344	OF RESEARCH RV GP	IND STUDY START D	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	EPORT 39 STUDY TYPE:	PRINTED: PAGE: TPE: CHRONIC/2 YR CA	PRINTED: 14-MAR-86 PAGE: 10 CHRONIC/2 YR CARCINGGENIC
ANIMAL NUMBER: DATE OF DEATH:	216 28-JAN-85	28.JAN-85 STUDY DAY OF DEA	SEX: FEM TH: 372	DOSE GROUP: 1 SAC STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 22	RIM SACRIFICE 2 WEIGHT: 226.00	(GMS)
DATE	>> DAY/WEEK OF STUDY	ORGAN NAME	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	N RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS	
14-001-85	631/91	OVARIES	860.0		υ.0568		
14 - OC! - 85	631/91	LIVER	929.9	2.9540 %	3.8724	707	
14 · 0CT · 85	631/91	KIDNEYS	1.592		0.9234	XO	
14 · 0CT · 85	631/91	ADRENAL GLANDS			0.0510	HIGH	
14-001-85	631/91	HEART	0.804	0.3558 %	0.4664	ð	
14-001-85	651/91	BRAIN	1.724	0.7628 %	1,0000	90	
14 - 001 - 85	631/91	SPLEEN	0.524		0.3039	HIGH	
	•		•				
LIVER	«	ADHERED TO PERITONEA	r WALL	PRESENT			
TISSUE / HISTOPATHOLOGIC FINDINGS	*< PATHOLOGIC	M I C R O S C O P I	S S I L S S	U E O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	T I O N S >> SEVERITY) / SPECIAL COMMENTS	OMMENTS	
ESOPHAGUS				TISSUE IS MISSING	ING		
EXORBITAL LACRIM				TISSUE IS MISSING	JN C		
AORTA				TISSUE IS MISSING	S. I.		
LIVER	EIGN GRANUL EPITHELIAL	IVER -CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE OUCTULE EPITHELIAL HYPERPLASIA -HEPATITIS		NOT SPECIFIED (PRESENT) NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	PRESENT) RACE) RACE)		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY START DATE: 23-JAN-84 STUDY START DATE: 23-JAN-84 STUDY START DATE: 23-JAN-84
ANIMAL NUMBER: 216 (TOX NO. 265) DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEA	SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 2 SEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 226.00 (GMS)
<pre></pre>	<pre><< M I C R O S C O P I C</pre>
JEJUNUM	TISSUE IS MISSING
MAMMARY GLANDS	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	P, PATH SITSCHER-34	E OF RESEARCH ERV GP 4			INDIVIDUAL ANIMAL STUDY NUMBER: START DATE: 23-JAN-84	ANIMAL DATA REPORT NUMBER: GLP83009		TYPE: CHRONI	PRINTED: 14-MAR-86 PAGE: 12 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC
ANIMAL NUMBER: 217 (TOX NO. 267) SEX: FENDATE OF DEATH: 28 JAN-85 STUDY DAY OF DEATH: 372	21 28-JAN-8	7 (Tox No. 2	57) S OF DEAT	SEX: FEMALE TH: 372	DOSE 3R STUDY W	DOSE SROUP: 1 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 211	ERIM SACRIFI WEIGHT:	CE 2 211.00 (GMS)
DATE	of STUDY	ORGAN NAME	NE E	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)		RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14.0CT-85 14.0CT-85 14.0CT-85	631/91 631/91 631/91	OVARIES LIVER KIDNEYS	:	0.103		0.0488 % 3.4943 % 0.7218 %	0.0577	. 8 8 8	
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91 631/91 631/91 631/91		GLANDS	0.077 0.738 1.786 0.463		0.0365 0.3498 0.8464 0.2194 x	0.0431 0.4132 1.0000 0.2592	H 00 0K H 0GH	
ORGAN NAME PERITONEAL CAV.	*	G R O S S O R KEYWORDS / PHRASES ADHESION(S) ADHERED-DIAPHRAGM &	, ₍ ,	AN OBS	S E R V A SEVERITY PRESENT	T I O N S >> GROSS FREE-TEXT COMMENTS SMALL INTESTINE ADHERED TO LIVER. IN WALL OF INTESTINE AT ADHESION. DIFFUSE.	OMMENTS DHERED TO LIVER. INE AT ADHESION.	HAS A SMM	HAS A 5MM BLACK DIVERTICULUM
C M I C R C M I C	PATHOLOGIC	M I C R O S C O P I	: _	S S I I 2	UE	OBSERVATIONS DISTRIBUTION (SEVERITY)	/ SPECIAL	COMMENTS	
ESOPHAGUS LIVERCAPSULAR FORI	EIGN GRANU	SOPHAGUS 1VER -CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA	NOIL			TISSUE IS MISSING NOT SPECIFIED (PRESENT) NOT SPECIFIED(TRACE)	SENT)		
KIDNEY	RENAL DISE	ASE				NOT SPECIFIED(TRACE)			

INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINGGE	DOSE GROUP: 1 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 211.00 (GMS)	O B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	TISSUE IS MISSING	NOT SPECIFIED (PRESENT)				
IMAL DA Ber: Gl N-84	. 1 OF DEA	B S E R STRIBUT	SSUE 1S	SSUE IS	SSUE 1S	SI ENE	SI JOS	SPEC11
VIDUAL ANIMAL DATA REP STUDY NUMBER: GLP83009 TE: 23-JAN-84	DOSE GROUP: 1 STUDY WEEK OF	0 0	:::	11	118	118	118	
INDIVI STE	BOS!	TISSUE				:		
INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	FEMALE 572	8 1 1						
STL	57) SEX: FEN OF DEATH: 372) I						
*	267) AY OF D	SCOP	:		•			•
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	217 (TOX NO. 267) SEX: FEMALE N-85 STUDY DAY OF DEATH: 372	C M I C R O S C O P I C OGIC FINDINGS						LERAL
UTE OF	217 ('' -85	4 10 FIN						LERAL
INSTIT	28 - JAN	PATHOLC		:			:	ONE SC
AN ARMY RES SUP : RAT/F	NUMBER: DEATH:	/ HISTO		:	:	NERVE	GLANDS	YES & OPTIC N
LETTERMAN ARMY INSTITUTE OF RI DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 217 DATE OF DEATH: 28-JAN-85	<pre></pre>	JEJUNUM	ILEUM	RECTUM	SCIATIC NERVE	MAMMARY GLANDS	EYES & OPTIC N METAPLASTIC B

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SER ISCHER-344	OF RESEARCH V GP	STUDY START DA	INDIVIDUAL ANIMAL DATA KEPUKI STUDY NUMBER: GLP83009 T DATE: 23.JAN.84		STUDY TYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: DATE OF DEATH: 11-DEC	221 11-0EC-84	ANIMAL NUMBER: 221 (TOX NO. 277) DATE OF DEATH: 11-DEC-84 STUDY DAY OF DEA	SEX: FEMALE DO	DOSE GROUP: 1 SACR STUDY WEEK OF DEATH: 47	SACRIFICE STATUS: SACRIFICED MORIBUND 47 TERMINAL BODY WEIGHT: 211.	IFICED MORIBUND Jeicht: 211.00 (GMS)
DATE	<pre>/veek Study</pre>	O R G A N W E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14 · 0CT · 85	631/91	OVARIES LIVER	0.142	0.0673 % 3.5521 % 0.718 %	0.0799 4.2154 4.2154	H1GH OK OK
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91	ADRENAL GLANDS HEART	0.072 0.739 1.778		0.0405 0.4156 1.0060	H 164
14 - 001 - 85	631/91	SPLEEN	0.462	0.2190 %	0.2598	HIGH
ORGAN NAME LIVER EYES & OPTIC N.		KEYNORDS / PHRASES	PERITONEUM.	E E E E E E E E E E E E E E E E E E E	COMMENTS DHERED TO RIGHT SIGERED TO HAIR ON VENTRAL SIDE OF	GROSS FREE TEXT COMMENTS WITH TWO LOOPS ADHERED TO RIGHT SIDE OF ABDOMINAL WALL RED MATERIAL ADHERED TO HAIR SMALL FOCAL AREA ON VENTRAL SIDE OF TAIL: 1 CM CRUSTY RAISED
C M I C R C TISSUE / HISTOPATHOLOGIC FINDINGS	PATHOLOGIC	M I C R O S C O P I	0 8 1 1 2 1	E OBSERVATIONS DISTRIBUTION (SEVERITY)	/ SPECIAL	COMMENTS
LIVER	EIGN GRANUL	IVERCAPSULAR FOREIGN GRANULOMATOUS REACTION		NOT SPECIFIED (PRESENT)	RESENT)	
DUODENUM	ATED REACTION	UODENUM	D INFLAMMATION	NOT SPECIFIED (PRESENT)	RESENT)	
RECTUM	:			TISSUE IS MISSING	(3	
BONE, STERNUM				TISSUE IS MISSING	(2	

.... TISSUE IS MISSING

ANIMAL NUMBER: 231 (Tox No. 318) SEX: FEMALE D DATE OF DEATH: 03-FEB-84 STUDY DAY OF DEATH: 12 S <- OR GAN WEIGHT: 12 S 14-OCT-85 631/91 CLIVER 14-OCT-85 631/91 KIDNEYS 14-OCT-85 631/91 KIDNEYS 14-OCT-85 631/91 RADENAL GLANDS 0.036 14-OCT-85 631/91 BRAIN 0.281 14-OCT-85 631/91 BRAIN 0.281 COT-85 631/91 BRAIN 0.281	0.28 GROUP: 1 TUDY WEEK OF DEATH: RELATIVE & OF BODY WEIGHT 0.0485 % 5.2351 % 1.464 % 0.0371 % 0.4351 % 1.6134 % 0.2897 % R V A I I O N S	SACRIFICE STATUS: SACRIFICED MORIBUND TERMINAL BODY WEIGHT: ORGAN TO BRAIN ORGAN WEIGHT RATIO STATUS 0.0300 OK 3.2447 HIGH 0.7105 OK 0.0230 HIGH 1.0000 HIGH 0.1796 HIGH	FICED MORIBUND AEIGHT: 97.00 (GMS) ORGAN STATUS OK HIGH OK HIGH OK HIGH HIGH HIGH HIGH HIGH
CONTRACTOR OF GAN WE I GHTS >>> DAY/WEEK OF STUDY ORGAN NAME WEIGHT (GM OF STUDY OVARIES CAST/91 LIVER CAST/91 LIVER CAST/91 KIDNEYS CAST/91 K	α ω ω	ORGAN TO BRAIN WEIGHT RATIO 0.0300 3.2447 0.7105 0.0230 0.2696 1.0000	ORGAN STATUS OK HIGH OK HIGH OK HIGH HIGH
6 531/91 OVARIES 0.047 6 531/91 LIVER 5 631/91 KIDNEYS 1.112 6 631/91 ADRENAL GLANDS 0.036 6 631/91 HEART 0.422 5 631/91 BRAIN 1.565 6 631/91 SPLEEN 0.281 6 6 0 S O R G A N O B KEYWORDS / PHRASES	E R V	0.0300 3.2447 0.7105 0.0230 0.2696 1.0000 0.1796	0K H1GH 0K H1GH 0K H1GH H1GH
5 631/91 ADRENAL GLANDS 0.036 631/91 BRAIN 1.565 631/91 SPLEEN 0.422 5 631/91 SPLEEN 0.281 < G R O S S O R G A N O B KEYWORDS / PHRASES	S E R C	0.0230 0.2696 1.0000 0.1796	H1GH OK H1GH H1GH
<pre><< G R O S S O R G A N O B KEYWORDS / PHRASES ADHERED TO DIAPHRAGM AND STOMACH</pre>			
	SEVERITY GROSS FREE-TEXT COMMENTS	COMMENTS CE IS ADHERED BY TES	
EYES & OPTIC N. CORNEAL OPACITY		AND SMALL INTESTINE. ANTERIOR SURFACE IS ADHERED Diaphragm. Bilateral Roljh Granular and Opaque Surface With Focal 3-4 mm area	ACE IS ADHERED IO E SURFACE WITH A
<pre></pre>	S U E O B S E R V A T I O N S DISTRIBUTION (SEVERITY) /	T I O N S >> (SEVERITY) / SPECIAL COMMENTS	COMMENTS
LIVERGREIGN GRANULOMATOUS REACTIONBILE DUCTULE EPITHELIAL HYPERPLASIA	NOT SPECIFIED (PRESENT) NOT SPECIFIED(TRACE)	PRESENT) RACE)	

RECTUM

LETTERMAN ARMY INSTITUTE OF RESEARCH LIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 I DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 231 (TOX NO. 318) SEX: FEMALE DOSE GR DATE OF DEATH: 03.FEB-84 STUDY DAY OF DEATH: 12 STUDY W	DOSE GROUP: 1 SACRIFICE STATUS: SACRIFICED MORIBUND STUDY WEEK OF DEATH: 2 TERMINAL BODY WEIGHT: 97.00 (GMS)
C M I C R O S C O P I C T I S S U E TISSUE / HISTOPATHOLOGIC FINDINGS	OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
TONGUE TONGUE IS MISSING	T!SSUE IS MISSING
MAMMARY GLANDS TISSUE IS MISSING	TISSUE IS MISSING
BONE, STERNUM TISSUE IS MISSING	TISSUE IS MISSING
EYES & OPTIC NCORNEAL VASCULARIZATION -CHRONIC KERATITIS -IRIDOCYCLITIS	NOT SPECIFIED(TRACE) NOT SPECIFIED(MILD) NOT SPECIFIED(MILD)

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	OF RESEARCH RV GP	INDIV S' STUDY START DATE	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: 14.MAR.86 PAGE: 1 STUDY IYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	235 29-AUG-84	ANIMAL NUMBER: 235 (Tox No. 333) SE DATE OF DEATH: 29-AUG-84 STUDY DAY OF DEATH	SEX: FEMALE DOS	DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 32	SACRIFICE STATUS: SACRIFICED 32 TERMINAL BODY WEIGHT:	STATUS: SACRIFICED MORIBUND RMINAL BODY WEIGHT: 196.00 (GMS)
DATE	DAY/WEEK OF STUDY		G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14-0CT-85 14-0CT-85 14-0CT-85	631/91	OVARIES LIVER KIDNEYS	0.096	0.0490 % 3.2781 % 0.7673 %	0.0523 3.4995 0.8192	:
14 · 0CT · 85 14 · 0CT · 85	631/91	ADRENAL GLANDS HEART	0.059	0.0301 x 0.2913 x 0.357 x	0.0321	HIGH LOW
14-001-85	631/91	SPLEEN	0.714		0.3389	HO I
LIVER WHOLE BODY		ADHERED TO DIAPHRAGM. SUBCUTANEOUS	PRESENT		X 4 CM MODERATELY F	RIGHT FLANK: 4 X 4 CM MODERATELY FIRM WELL DEMARCATED MASS
PERITONEAL CAV		SMALL INTESTINE	PRESENT	_	HERED TO ABDOMINAL MASS VIA FISTULA	UVERLIING SKIN IS DARK BLOCZBIACK. PROXIMAL ILEUM ADHERED TO ABDOMINAL WALL AND COMMUNICATES WITH SUBCUTANEOUS MASS VIA FISTULA THROUGH ABDOMINAL WALL
TISSUE / HISTOPATHOLOGIC FINDINGS	STOPATHOLOGIC	M I C R O S C O P I C FINDINGS	1 1 S S U E	O B S E R V A DISTRIBUTION (/ SPECIAL	COMMENTS
THYMUS	:			TISSUE IS MISSING		
LIVER	EIGN GRANUI	-CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA		NOT SPECIFIED (PRESENT NOT SPECIFIED(MILD)	ESENT) D)	
KIDNEY	RENAL DISE	IDNEYPROGRESSIVE RENAL DISEASE		NOT SPECIFIED(TRACE)	(£)	

MAR-86 Nogenic	Bro	:	74			
PRINTED: 14-MAR-86 PAGE: 2 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC	DOSE GROUP: 1 SACRIFICE STATUS: SACRIFICED MORIBUND STUDY WEEK OF DEATH: 32 TERMINAL BODY WEIGHT: 196.00 (GMS)	A T I O N S >> (SEVERITY) / SPECIAL COMMENTS				
DATA REPORT GLP83009	DEA	O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	E IS MISSING	E IS MISSING	E IS MISSING	NOT SPECIFIED (MILD)
INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 TUDY START DATE: 23-JAN-84	IALE	TISSUE OBSERV DISTRIBUTION	TISSUE IS MISSING	TISSUE IS MISSING	TISSUE IS MISSING	S LON
SEARCH	(Tox No. 333) SEX: FEN STUDY DAY OF DEATH: 220	OGIC FINDINGS				
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 235 (TOX NO. 333) SEX: DATE OF DEATH: 29-AUG-84 STUDY DAY OF DEATH:	TISSUE / HISTOPATHOLOGIC FINDINGS	RECTUM	TONGUE	MAMMARY GLANDS	EYES & OPTIC N

NOT SPECIFIED (PRESENT)

CECUMCOMPOUND RELATED INFLAMMATORY REACTION

ANIMAL ACABER.	572	(Tox No. 370)	SEX: FEMALE DOSE GROUP:	_	SACRIFICE STATUS: SACRIFICED MORIBUND	FICED MORIBUND
DATE OF DEATH: 31.DEC-84	31.DEC.84	STUDY DAY OF DEATH ORGAN NAME	S >> UTE ORGA HT (GMS)	STUDY WEEK OF DEATH: 50	TERMINAL BODY WEIGHT: ORGAN TO BRAIN ORGA WEIGHT RATIO STAT	FEIGHT: 183.00 (GMS) ORGAN STATUS
14-0CT-85 631/9 14-0CT-85 631/9	631/91	OVARIES LIVER	0.079	0.0432 % 3.5268 %	0.0440	: : % %
	631/91 631/91 631/91	KIDNEYS ADRENAL GLANDS HEART	1.565 0.062 0.547	0.8552 % 0.0339 % 0.2989 %	0.8709 0.0345 0.3044	OK H1GH LOW
	631/91	BRAIN	1.797	0.9820 % 0.3055 %	1.0000	H1GH H1GH
ORGAN NAME	*	GROSSORGAI	N OBSERV SEVERITY	A T I O N S >> GROSS FREE-TEXT C	COMMENTS	
LIVER WHOLE BODY PERITONEAL CAV.		ADHERED TO DIAPHRAGM AND PERINEUM SMALL INTESTINE	D STOMACH PRESENT PRESENT PRESENT	STOMACH ADHERED TO PERITONEUM HAIR STAINED YELLOW TO ORANGE ONE LOOP JEJUNUM AND CECUM AD WITH COMMON OPENING INTO SUBC	STOMACH ADHERED TO PERITONEUM HAIR STAINED YELLOW TO ORANGE AND WET ONE LOOP JEJUNUM AND CECUM ADHERED TO ABDOMINAL WALL WITH COMMON OPENING INTO SUBCUTANEOUS TISSUE WITH AR	ET TO ABDOMINAL WALL US TISSUE WITH AREA
WHOLE BODY		SKIN	PRESENT	ABDOMEN: 2 X 1 CM R	FILLED WITH INGESTA ABDOMEN: 2 X 1 CM RAISED BROWN TO BLACK AREA .5 CM	LACK AREA .5 CM HIGH
C M I C R I I STOPATHOLOGIC FINDINGS) 1 90 101 **	M I C R O S C O P I C FINDINGS	TISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	O N S >> ERITY) / SPECIAL COMMENT	OMMENTS

	8	rown	676
PRINTED: 14-MAR-86 PACE: 2 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC	FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SACRIFICED MORIBUND 44 STUDY WEEK OF DEATH: 50 TERMINAL BODY WEIGHT: 183.0C (GMS)	T I S S U E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	NI)
INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	DOSE GROUP: 1 SACRIFI STUDY WEEK OF DEATH: 50	0 B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPE	NOT SPECIFIED (PRESENT)
INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	SEX: FEMALE DOSE G DEATH: 344 STUDY	PIC TISSUE	HATION\FIBROSIS
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 STU	ANIMAL NUMBER: 245 (Tox No. 370) SEX: FEMA DATE OF DEATH: 31-DEC-84 STUDY DAY OF DEATH: 344	C M I C R O S C O P I C TISSUE / HISTOPATHOLOGIC FINDINGS	SKINCOMPOUND PRESENT WITH ASSOCIATED INFLAMMATION\FIBROSIS

DIV OF RES SUPP, PATH SERV GP SPECIES: RAI/FISCHER-344	P, PATH SE ISCHER-344	RV GP	STUDY START DATE: 23.JAN.84	STUDY NUMBER: GLP83009 TE: 23.JAN.84	STUDY TY	PE: CHRONI	STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER:	249 15-JAN-85	ANIMAL NUMBER: 249 (TOX NO. 377) SEX: FEMALE DATE OF DEATH: 15-JAN-85 STUDY DAY OF DEATH: 359		DOSE GROUP: 1 SACRI STUDY WEEK OF DEATH: 52	SACRIFICE STATUS: FOUND DEAD 52 TERMINAL BODY WEIGHT	DEAD HEIGHT:	184.00 (GMS)
DATE	A C C C C C C C C C C C C C C C C C C C	Ш	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14-001-85	631/91	OVARIES	0.152		0.1058	H1GH H1GH	
14 - 001 - 85	651/91	LIVER	1.974	1.0728 %	1.3747	OK	
14-0CT-85	631/91	ADRENAL GLANDS	0.062		0.0432	H I GH	
14-001-85	631/91	HEART	0.739	% 9104.0 % 9042 0	1,0000	š	
14 - 0CT - 85 14 - 0CT - 85	631/91	BRAIN SPLEEN	0.393		0.2737	H I GH	
URGAN NAME	*	G R O S O R G A	A N O B S E R V SEVERITY	A T I O N S >> GROSS FREE-TEXT	COMMENTS		
IVER		ADHERED-DIAPHRAGM & P.	PERITONEUM. PRESENT				
118SUE / H1ST(>> >> DPATHOLOGIC	<pre></pre>	C 1188UE	OBSERVATIONS DISTRIBUTION (SEVERITY)	I O N S >>	COMMENTS	
CIVER CAPSULAR FOR	REIGN GRANL E EPITHELIA	1VERCAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MILD)	RESENT) LD)		
KIDNEY	RENAL DISE	SSIVE RENAL DISEASE		NOT SPECIFIED(TRACE)	(CE)		
6	C L			TISSUE IS MISSING	(3		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE , PATH SEI	OF RESEARCH RV GP	INDIVIDUAL ANIMAL STUDY S:ART DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23.JAN.84	ORT	PRINTED: 14-MAR-86 PAGE: 1 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	252 22-0CI-84	ANIMAL NUMBER: 252 (TOX NO. 385) DATE OF DEATH: 22-OCT-84 STUDY DAY OF DEA	SEX: FEMALE TH: 274	DOSE GROUP: 1 SACE	SACRIFICE STATUS: SACRIFICED MORIBUND 40 TERMINAL BODY WEIGHT: 215.	IFICED MORIBUND JEIGHT: 215.00 (GMS)
DATE	DAY/WEEK	O R G A N W E B	GHTS >> ABSOLUT: ORGAN WELSHT (GMS)	RELATIVE X OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
14 - 0CT - 85 14 - 0CT - 85 14 - 0CT - 85	631/91 631/91 631/91	OVARIES LIVER KIDNEYS	0 084 6 902	0.0391 x 3.2102 x 0.6805 x	0.0468 3.8473 0.8155	, , , , , , , , , , , , , , , , , , ,
14 - 000 - 85 14 - 000 - 85 14 - 000 - 85 14 - 000 - 85	631/91 631/91 631/91 631/91	ADRENAL GLANDS HEART BRAIN SPLEEN			0.0256 0.3874 1.0000 0.3718	H1GH OK OK H1GH
ORGAN NAME	*	G R O S S O R (SAN GBSERV SEVERITY	V A T 1 O N S >> TY GROSS FREE-1EXT COMMENTS	COMMENTS	
LIVER OVARIES WHOLE BODY	. 2	ADHERED TO DIAPHRAGM HEMORRHAGE(S) SKIN	PRESENT PRESENT PRESENT		TO INCLUDE INTESTINES LEFT IS SURROUNDED BY A SMALL RED FLUID FILLED SAC S X S CM LUMP ON LEFT LATERAL ASPECT WITH 2 X 2 CM X S CM LUMP ON LEFT LATERAL ASPECT WITH 2 X 2 CM S X S CM LUMP HAS ERODED THROUGH ABDOMINAL TO SXIN	TO INCLUDE INTESTINES TO INCLUDE INTESTINES LEFT IS SURROUNDED BY A SMALL RED FLUID FILLED SAC 5 x 5 CM LUMP ON LEFT LATERAL ASPECT WITH 2 x 2 CM BLACK AREA IN CENTER. LUMP HAS ERODED THROUGH ABDOMINAL WALL
FERITONEAL CAV.		ADHESION(S)	PRESENT		S, DIAPHRAGM,ABDOMII Which has perforati	SMALE INTESTINES, DIAPHRAGM, ABDOMINAL WALL, LIVER. LUMP ON DISTAL ILEUM WHICH HAS PERFORATED THROUGH ABDOMINAL WALL
C M I C R C ITSSUE / HISTOPATHOLOGIC FINDINGS	0PATHOLOGIC	M I C R O S C O P I	CTISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY) /	SPEC	IAL COMMENTS
PARATHYROID	:			TISSUE IS MISSING	9	
LIVER CAPSULAR FORE BILE DUCTULE	EIGN GRANU	IVERCAPSULAR FOREIGN GRANULOMATOUS REACTION		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MILD)	PRESENT)	

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LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344 STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 I DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: 252 (TOX NO.385) SEX: FEMALE DO DATE OF DEATH: 22-OCT-84 STUDY DAY OF DEATH: 274 ST	DOSE GROUP: 1 SACRIFICE STATUS: SACRIFICED MORIBUND STUDY WEEK OF DEATH: 40 TERMINAL BODY WEIGHT: 215.00 (GMS)
CROSCOPIC TISSUE / HISTOPATHOLOGIC FINDINGS	E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
JLEUP COMPOUND RELATED INFLAMMATORY REACTION	NOT SPECIFIED (PRESENT)
PANCREASPERITONITIS	NOT SPECIFIED(TRACE)
STOMACHCOMPOUND RELATED INFLAMMATORY REACTION	NOT SPECIFIED (PRESENT)
- PROCEDURE RELATED GRANULOMATOUS CELLULITIS SUBCUTIS	NOT SPECIFIED (PRESENT)

LETTERMAN ARMY INSTITUTE OF RESEAKCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	OF RESEAKCH RV GP	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT Sludy Number: Glp83009 T Date: 23.jan.84		PRINTED: 14-MAR-86 PAGE: 1 STUDY TYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: DATE OF DEATH:	274 28-JAN-85	ANIMAL NUMBER: 274 (TOX NO. 229) SEX: FEDDATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	4ALE	DOSE GROUP: 2 SACR STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE Z 54 TERMINAL BODY WEIGHT: 204.	ITM SACRIFICE 2 JEIGHT: 204.00 (GMS)
DATE	DAY/WEEK OF STUDY	ORGAN WAME	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BOOT WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14 · 0CT · 85 14 · 0CT · 85	631/91	OVARIES LIVER	0.096	0.0471 x 2.7093 x	0.0556	101 0K
14-0c1-85 14-0c1-85	631/91	KIDNEYS ADRENAL GLANDS			0.8056	0K #1G#
14 · 0C1 · 85 14 · 0C1 · 85 14 · 0C1 · 85	631/91 631/91 631/91	HEARI BRAIN SPLEEN	0.742 1.728 0.416	0.363/ % 0.8471 % 0.2039 %	0.4294 1.0000 0.2407	UK OK H1GH
ORGAN NAME	: • •	G R O S S O R KEYWORDS / PHRASES	GAN OBSERV SEVERITY	S E R V A T I O M S >> SEVERITY GROSS FREE-TEXT COMMENTS	COMMENTS	
EYES & OPTIC N	,	TRREGULAR EYE SURFACE ADHERED TO DIAPHRAGM.	CE. PRESENT	ENT BILATERAL ENT 1-2 CM		
TISSUE / HISTOPATHOLOGY: FINDINGS	PATHOLOGI:	M I C R O S C O P FINDINGS	U S S I L S S II	E OBSERVATIONS DISTRIBUTION (SEVERITY)	ONS >> VERITY) / SPECIAL COMMENTS	OHMENTS
LIVER	EIGN GRANU	IVERCAPSULAR FOREIGN GRANULOMATOUS REACTION		NOT SPECIFIED (PRESENT)	(ESENT)	
RECTUM				TISSUE IS MISSING		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	OF RESEARCH	INC STUDY START D	INDIVIDUAL ANIMAL DATA REP STUDY START DATE: 23.JAN-84	0R T	PRINTED: 14-MAR-86 PAGE: 2 STUDY TYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: DATE OF DEATH:	275 28 - JAN - 85	ANIMAL NUMBER: 275 (TOX NO. 231) SEX: FEI DATE OF DEATH: 28.JAN.85 STUDY DAY OF DEATH: 372	SEX: FEMALE	DOSE GROUP: 2 SAC STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 199.	RIN SACRIFICE 2 WEIGHT: 199.00 (GMS)
DATE	ANT NEEK OF STUDY	ORGAN NAME	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	N RELATIVE & OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91 631/91 531/91	OVARIES LIVER KIDNEYS	0.144 5.861 1.572	0.0724 % 2.9452 % 0.7899 %	0.0784 3.1905 0.8557	H I ON
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91 531/91 631/91 631/91	ADRENAL GLANDS HEART BRAIN SPLEEN			0.0430 0.3560 1.0000 0.2330	H GH H CH H CH H CH H CH H
ORGAN NAME EYES & OPTIC N. EYES & OPTIC N.	;	KEYWORDS / PHRASES		SEVERITY GROSS FREE-TEXT TRACE LEFT PRESENT WHITE, BILATERAL PRESENT 1 CM	EXT COMMENTS	
IISSUE / HISTOPATH	ATHOLOGIC	C M I C R O S C O P I	8 8 1 1 0 1	U E O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	T I O N S >> (SEVERITY) / SPECIAL COMMENTS	OMMENTS
CAPSULAR FORE -CAPSULAR FORE -BILE DUCTULE -HEPATITIS	IGN GRANUI	CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA -HEPATITIS		NOT SPECIFIED (PRESE NOT SPECIFIED(MILD) NOT SPECIFIED(TRACE)	SPECIFIED (PRESENT) SPECIFIED(MILD) SPECIFIED(TRACE)	
RECTUM				TISSUE IS MISSING	SING	
YES & OPTIC N.	AL IZATION	EYES & OPTIC N		VACABLE CONTRACTOR CON	3 4 4 4 4	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	E OF RESEARCH ERV GP	IND STUDY START DA	INDIVIDUAL ANIMAL DATA REPORT TUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84		PRINTED: 14-MAR-86 PAGE: 3 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	PRINTED: 14.MAR.86 PAGE: 3 C/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	274 28-JAN-85	ANIMAL NUMBER: 276 (TOX NO. 234) SEX: FEP DATE OF DEATH: 28 JAN 85 STUDY DAY OF DEATH: 372	IALE	DOSE GROUP: 2 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 201.	RIM SACRIFICE Z WEIGHT: 201.00 (GMS)	(SHS)
DATE	A STUDY	ORGAN NAME	E I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14 - OCT - 85 14 - OCT - 85	631/91	OVARIES	0.120	3.0035 x	\$0.000	. XX	
14-001-85	631/91	KIDNEYS		0.8279 %	0.9777	, o -	
14 - 001 - 85	631/91	HEART		0.4154 %	9065.0	, yo	
14 · 0CT · 85 14 · 0CT · 85	631/91 631/91	BRAIN SPLEEN	1.702 0.447	0.8468 x 0.2224 x	1.0000 0.2626	OK H1GH	
ORGAN NAME	*	G R O S S O R KEYWORDS / PHRASES	8 0 2 4 5	S E R V A T I O N S >> SEVERITY GROSS FREE-TEXT COMMENTS	OMMENTS		
EYES & OPTIC N		IRREGULAR EYE SURFA CORNEAL OPACITY		PRESENT LEFT PRESENT RIGHT 1 X 2 MM WHITE OPACITY	HITE OPACITY		
C M I C R O TISSUE / HISTOPATHOLOGIC FINDINGS	** PATHOLOGIC	M C R O S C O P	0 0 0 1 1 0 1 0	E O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	ONS >> ERITY) / SPECIAL COMMENTS	COMMENTS	:
PARATHYROID .				TISSUE IS MISSING			
LIVER CAPSULAR FOR	EIGN GRANL	-CAPSULAR FOREIGN GRANULOMATOUS REACTION-BILE DUCTULE EPITHELIAL HYPERPLASIA		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MODERATE)	ESENT) Erate)		

DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	PP, PATH SEF FISCHER-344	.v GP		STUDY START DA	STUDY NUMBER: GLP83009 START DATE: 23-JAN-84		PRINTED: 14-MAR-86 PAGE: 4 STUDY TYPE: CHPONICA AS ASSESSED	PRINTED: 14-MAR-86 PAGE: 4
ANIMAL NUMBER: 277 (TOX NO. 239) SEX: FEI DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	277 : 28-JAN-85	(Tox No. 2 STUDY DAY	39) SEX Of DEATH:	MALE	DOSE GROUP: 2 SAC STUDY WEEK OF DEATH: 54	RIFICE STATU	RIM SACRIFIC	CE 2
DATE	AAY/WEEK OF STUDY	ORGAN DAME	W E 1 G	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN	;	
14-0CT-85 14-0CT-85	631/91	OVARIES LIVER	,	0.143	0.0636	0.0781	S	
14 - 0C1 - 85 14 - 0C1 - 85	631/91 631/91	A S	GLANDS	1.596	0.7093 x 0.7093 x	3.5153 0.8721	LOW OK	
14 · 0C1 · 85	631/91 631/91	HEART BRAIN		0.807	0.3587 %	0.0492	H1GH OK	
14 - OCT - 85	631/91	SPLEEN		0.522	0.2320 %	1,0000 0,2852	OK H1GH	
LIVER	JA.	ADHERED TO PERITONEAL WALL	TITONEAL WA		PRESENT	2 .		
C M I C R (TISSUE / HISTOPATHOLOGIC FINDINGS	ATHOLOGIC F	M I C R O S C O P FINDINGS	0 P I C	T I S S U	E O B S E R V A T I O N S DISTRIBUTION (SEVERITY)		COMMENTS	
HEART	-				NOT SPECIFIED(TRACE)	TRACE)	:	
LIVER	IGN GRANULO EPITHELIAL	LAR FOREIGN GRANULOMATOUS REACTION DUCTULE EPITHELIAL HYPERPLASIA	10N		NOT SPECIFIED (PRESENT) NOT SPECIFIED(TRACE)	(PRESENT)		
PROGRESSIVE RENAL DISEASE	ENAL DISEASI	ISEASE	:		NOT SPECIFIED (TRACE)	IRACE)		
HEINADY GLADOLD								

Ų	Bro	wn6
PRINTED: 14.MAR.86 PAGE: 5 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC	EX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 2 H: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 225.00 (GMS)	/ SPECIAL COMMENTS
INDIVIDUAL ANIMAL DATA REPORT STUDY START DATE: 23-JAN-84	DOSE GROUP: 2 SACRIFICE ST STUDY WEEK OF DEATH: 54 TERM	U E O B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
DIV OF RES SUPP, PATH SERV GP SPECIES: RAI/FISCHER-344	ANIMAL NUMBER: 277 (TOX NO. 239) SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 2 DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 225.00 (GMS)	<pre></pre>

. TISSUE IS MISSING

SPECIES: RAT/FISCHER-344	I SCHER - 544		STUDY START DATE: 23-JAN-64	70 840	10018		STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH: 28-JA	278 28-JAN-85	(Tox No. 244) Study day of DEA	MALE	DOSE GROUP: 2 SACR.	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 191.	RIM SACRIFICE 2 WEIGHT: 191.00	00 (GMS)
DATE	A C C C C C C C C C C C C C C C C C C C	ORGAN NAME		RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14 - 0CT - 85 14 - 0CT - 85	631/91	OVARIES LIVER	0.130	0.0681 X 3.0990 X	0.0718	H I GH OK	
14 · 0CT · 85 14 · 0CT · 85	631/91	KIDNEYS ADRENAL GLANDS	1.477		0.8156 0.0276	OK H1GH	
14 - 0CT - 85 14 - 0CT - 85 14 - 0CT - 85	631/91 631/91 631/91	HEART Brain Spleen	0.617 1.811 0.418	0.3230 x 0.9482 x 0.2188 x	0.3407 1.0000 0.2308	90K H1GH H1GH	
ORGAN NAME EYES & OPTIC N.	¥	GROSSORGA KEYWORDS / PHRASES IRREGULAR EYE SURFACE.	SEV / SERV / SEVERITY	GROSS FREE-TEXT COMMENTS GROSS FREE-TEXT COMMENTS BILATERAL	COMMENTS		
/	PATHOLOGIC	POLYP M I C R O S C O P I C FINDINGS	PRESENT PRESENT T I S S U E	LEFT HORN, ENDOMETRIAL OBSERVATIONS DISTRIBUTION (SEVERITY)	TRIAL ONS >>	COMMENTS	
LUNGS	OVER SUBSTREET	UNGS		NOT SPECIFIED(MILD)	(a)		
THYMUS		811		NOT SPECIFIED(TRACE)	(CE)		
LIVERCAPSULAR FOREIGN GRANULOMATOUS REAC-81LE DUCTULE EPITHELIAL HYPERPLASIA	EIGN GRANUL EPITHELIAL	-CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MILD)	(ESENT)		

UTERUS

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84
278 (TOX NO. 244) S N-85 STUDY DAY OF DEAT	EX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 2 H: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 191.00 (GMS)
TISSUE / HISTOPATHOLOGIC FINDINGS	MICROSCOPIC TISSUE OBSERVATIONS >> FINDINGS DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
UTERUSENDOMETRIAL STROMAL POLYP	NOT SPECIFIED (PRESENT)
MAMMARY GLANDS	271231F 31 21331F

LELLERMAN AKMI INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	PATH SEF	or Research	STUDY START DATE: 23-JAN-84	STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PAGE: 8 STUDY TYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: DATE OF DEATH:	279 28-JAN-85	ANTMAL NUMBER: 279 (TOX NO. 246) DATE OF DEATH: 28-JAN-85 STUDY DAY OF DE	SEX: FEMALE DOSE (ATH: 372 STUDY	DOSE GROUP: 2 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 239.	IIM SACRIFICE 2 JEIGHT: 239.00 (GMS)
DATE	C C STUDY	O R G A N W E I	I G H T S ->- ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14.0CT-85	631/91	OVARIES	0.098	0.0410 x 2.7766 x	0.0569	LOW
14.0CT-85	631/91	KIDNEYS ADENAL GLANDS	1.778	0.7439 %	1.0325 0.0465	0K H1GH
14-001-85	631/91	HEART	0.814	0.3406 %	0.4727	OK S
14-0CT-85 14-0CT-85	631/91 631/91	BRAIN Spleen	1.722 0.447	0.1870 x 0.1870 x	0.2596	H01H
ORGAN NAME	*	G R O S S O R (KEYWORDS / PHRASES	GAN OBSERV SEVERITY	A T I O N S >> r GROSS FREE-TEXT COMMENTS	OWMENTS	
EYES & OPTIC N.	_	FOCAL CORNEAL OPACI	TY PRESENT	IMM WHITE FOCUS		
<pre></pre>	** ** **	M I C R O S C O P FINDINGS	1 C 1 I S S C E	OBSERVATIONS OBSERVATIONS DISTRIBUTION (SEVERITY)	ONS >> FERITY) / SPECIAL COMMENTS	COMMENTS
LIVER	1110	IVERFOCUS BASOPHILIC		NOT SPECIFIED(TRACE)	(CE)	
SKIN				TISSUE IS MISSING		
HAMMARY GLANDS				TISSUE IS MISSING	_	
PITUITARY GLAND				NOT SPECIFIED (PRESENT)	(ESENT)	

ر ت	Brov	_{vn==688}	3	:	:	
PRINTED: 14-MAR-86 PAGE: 9 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	1CE 2 209.00 (GMS)					
TYPE: CHRO	ERIM SACRIF	ORGAN	H 0 0 H 0 0		>> SPECIAL COMMENTS	
	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 209.	ORGAN TO BRAIN WEIGHT RATIO	0.2936 4.0849 0.9295 0.0470 0.4180 1.0000	S >> REE-TEXT COMMENTS SMALL PUNCTATE OPACITY		ESENT) CE) CE)
INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	DOSE GROUP: 2 SACRI STUDY WEEK OF DEATH: 54	RELATIVE & OF BODY WEIGHT	0.2450 % % % % % % % % % % % % % % % % % % %	GROSS F GROSS F LEFT RIGHT, 5 CM	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	
INDIVIDUA STUDY STUDY START DATE:	, , ,	G N T S ->- ABSOLUTE ORGAN WEIGHT (GMS)	0.512 7.124 1.621 0.082 0.729 1.744	A N O B S E R V SEVERITY PRESENT TRACE PRESENT PRESENT ERITONEUM. PRESENT	C T 1 S S U E	
CH	247) SI	G A N W E 1 G	OVARIES OVERIES TIVER TIDNEYS ADRENAL GLANDS ADRENAL BRAIN SPLEEN	. G . G . Z	-	EACTION SIA
OF RESEAR	(Tox No.	ORGAN ORGAN	OVARIES LIVER KIDNEYS ADRENAL HEARI BRAIN	G R O S S O R KEYWORDS / PHRASES IRREGULAR EYE SURFI CORNEAL OPACITY CYST(S) WITHIN OVAR	M I C R O	REIGN GRANULOMATOUS REACTION E EPITHELIAL HYPERPLASIA VACUOLIZATION
INSTITUTE P, PATH SE ISCHER-344	28. JAN-85	A STUDY	631/91 631/91 631/91 631/91 631/91 631/91	*		EIGN GRANU EPITHELIA VACUOLIZAT
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 280 (Tox No. 247) SEX: FEMALE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	DATE	14 - 0CT - 85 14 - 0CT - 85	ORGAN NAME EYES & OPTIC N EYES & OPTIC N OVARIES	C M I C R C I I I SSUE / HISTOPATHOLOGIC FINDINGS	:윤국 2

PRINTED: 14.MAR-86 PAGE: 10 STUDY TYPE: CHRONIC/2 YR CARCINGENIC	DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 209.00 (GMS)	U E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS			
ATA LP8	SACRIFICE DEATH: 54	O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPE	IS MISSING	IS MISSING	NOT SPECIFIED(TRACE)
INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	ALE	1 S S	TISSUE IS MISSING	TISSUE IS MISSING	S TON
LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	ANIMAL NUMBER: 280 (TOX NO. 247) SEX: FEMALE DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	C NICROSCOPIC TISSUE / HISTOPATHOLOGIC FINDINGS	URINARY BLADDER	PANCREAS	NOSE/TURBINATESACUTE INFLAMMATION

DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	P, PATH SEF 1SCHER-344	4V GP	œ		SI	PAGE: 11 E: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 28-JAN-85	28-JAN-85	281 (Tox No. 249) SEX AN-85 STUDY DAY OF DEATH:	FEMALE 372	DOSE GROUP: 2 SACRI STUDY WEEK OF DEATH: 54	: S:	INTERIM SACRIFICE 2 BODY WEIGHT: 220.00 (GMS)
DATE	A < O < O < O < O < O < O < O < O < O <	O R G A N W E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14-0CT-85 14-0CT-85 14-0CT-85	631/91		0.091 5.940 1.553		0.0509 3.3240 0.8691	70 00 00 00
14 · 0C1 · 85 14 · 0CT · 85 14 · 0CT · 85 14 · CCT · 85	631/91 631/91 631/91 631/91	ADRENAL GLANDS HEART Brain Spleen	0.062 0.916 1.787 0.482	0.0282 % 0.4164 % 0.8123 % 0.2191 %	0.0347 0.5126 1.0000 0.2697	N1GH OK OK H1GH
ORGAN NAME	*	G R O S S O R G KEYWORDS / PHRASES	AR OBSE SEVE	A T 1 O N S >> GROSS FREE-TEXT	COMMENTS	
EYES & OPTIC N LIVER	•	OCCULAR DISCHARGE ADHERED-DIAPHRAGM &	PRESENT PRESENT PRESENT	ENT RED DISCOLORATION AROUND	THE EYES,	BILATERAL
C M I C R C		M I C R O S C O P I FINDINGS	0 8 1 1 3 2 0 1	E O B S E R V A T 1 O DISTRIBUTION (SEVER)	N S >>	COMMENTS
ESOPHAGUS				TISSUE IS MISSING		
EXORBITAL LACRIM	M I			TISSUE IS MISSING		
HEART	, , ,	EARTCARDIOMYOPATHY		NOT SPECIFIED(TRACE)	CE)	
LIVER	EIGN GRANUL EPITHELIAL	-CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA -HEPATITIS		NOT SPECIFIED (PRESENT) NOT SPECIFIED(MILD) NOT SPECIFIED(TRACE)	ESENT) D) CE)	
EYES & OPTIC N.				:		

DAT	PRINTED: 14.MAR.86 PAGE: 12 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
SEX: FEMALE DOSE GROUP: 2 ATH: 372 STUDY WEEK OF DEAT	DOSE GROUP: 2 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 220.00 (GMS)
IC TISSUE OBS	0 B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
EYES & OPTIC N	
AD SEBACTOUSTISSUE IS MISSING	

Brown		6	9	2
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LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE D, PATH SE ISCHER-344	OF RESEARCH RV GP	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23.JAN·84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23.JAN.84		PRINTED: 14-MAR-86 PAGE: 13 STUDY TYPE: CHRONIC/2 YR CARCINGGENIC	PRINTED: 14-MAR-86 PAGE: 13 C/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	282 28-JAN-85	ANIMAL NUMBER: 282 (Tox No. 250) DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEA	SEX: FEMALE IH: 372	DOSE GROUP: 2 STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 219.	RIM SACRIFICE 2 WEIGHT: 219.0	CE 2 219.00 (GMS)
DATE	DAY/WEEK OF STUDY	O R G A N W E	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14-0CT-85 14-0CT-85	631/91	OVARIES LIVER	0.092	0.0420 x 2.7174 x	0.0527	non 10M	
14-0CT-85 14-0CT-85	631/91 631/91	KIDNEYS ADRENAL GLANDS			0.0372	NI GH	
14-0CT-85 14-0CT-85	631/91	HEART	0.836 1.746	0.3817 % 0.7973 %	0.4788 1.0000	š š	
14 · 0CT · 85	631/91	SPLEEN	0.482	0.2201 %	0.2761	нісн	
ORGAN NAME	*	G R O S S O R KEYWORDS / PHRASES	8 0 N V 5	∀	OMMENTS		
EYES & OPTIC N.		CORNEAL OPACITY ADHERED TO PERITONEAL WALL	-	PRESENT LEFT 1MM WHITE FOC PRESENT 1CM IN DIAMETER	10		
C M I C R C TISSUE / HISTOPATHOLOGIC FINDINGS	>> PATHOLOGIC	M I C R O S C O P	1 C T 1 S S U	E OBSERVATIONS DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS	
PARATHYROID				TISSUE IS MISSING			
SALIVARY GLAND				TISSUE IS MISSING			
LIVERCAPSULAR FORE -BILE DUCTULE	EIGN GRANU EPITHELIA	-CAPSULAR FOREIGN GRANULOMATOUS REACTION -BILE DUCTULE EPITHELIAL HYPERPLASIA		NOT SPECIFIED (PRESENT) NOT SPECIFIED (TRACE)	ESENT) CE)		
URINARY BLADDER				TISSUE IS MISSING			

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	ARMY INSTITUTE S SUPP, PATH SER RAT/FISCHER-344	OF RESEARCH RV GP		IN STUDY START	10 A	VIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 TE: 23.JAN-84		PRIN P P P	PRINTED: 14.MAR.86 PAGE: 15 STUDY TYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: 283 (TOX NO. 251) DATE OF DEATH: 28-JAN-85 STUDY DAY OF	283 28-JAN-85	(Tox No. STUDY DA	OX NO. 251) SEX: FEMALE STUDY DAY OF DEATH: 372	X: FEMALE : 372	DOSE GROUP: STUDY WEEK	2 0f DEATH:	SACRIFICE STATUS: INTERIM SAC 54 TERMINAL BODY WEIGHT:	STATUS: INTERIM SACRIFICE 2 RMINAL BODY WEIGHT: 212.0	CE 2 212.00 (GMS)
DATE	OAY/WEEK OF STUDY	O R G A N ORGAN NAME	. I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	. 2	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS	
14.0CT-85 14.0CT-85 14.0CT-85	631/91 631/91 631/91	OVARIES LIVER KIDNEYS		0.083 5.732 1.469		0.0392 % 2.7038 % 0.6929 %	0.0451	10 N 10 N 10 N	
14.0CT.85 14.0CT.85 14.0CT.85	631/91 631/91 631/91 631/91	AORENAL HEART BRAIN SOLFEN	GLANDS	0.068 0.654 1.842		0.0321 % 0.3085 % 0.8689 %	0.0369 0.3550 1.0000	H1GH OK OK	
ORGAN NAME	· ¥	G R O S S O R KEYWORDS / PHRASES	ORGA IRASES		S E R V A SEVERITY	T I O N S >>			
EYES & OPTIC N. LIVER		IRREGULAR EYE SURFAC ADHERED TO DIAPHRAGM	SURFACE.	, <u>a</u>	MILD				
TISSUE / HISTOPATHO.OGIC FINDINGS	C M L C R OPATHO OGIC FINDINGS	M L C R O S C O P L	0 1 4 0 0	5 5 1 1		OBSERVATIONS	/ SPECIAL	COMMENTS	
LIVERCAPSULAR FOREIGN GRANULOMATOUS REACTION BILE DUCTULE EPITHELIAL HYPERPLASIA	EIGN GRANDE	LAR FOREIGN GRANULOMATOUS REACT DUCTULE EPITHELIAL HYPERPLASIA	110N		:	NOT SPECIFIED (PRESENT) NOT SPECIFIED(TRACE)	ESENT)		
KIDNEYPROGRESSIVE RENAL DISEASE	ENAL DISEA	S			:	NOT SPECIFIED(TRACE)	;E)		
MAMMARY GLANDS					:	TISSUE IS MISSING			
EYES & OPTIC N	NTATION		•	:	•	NOT SPECIFIED(TRACE)	Ę)		

		• · · · · · · · · · · · · · · · · · · ·	**************************************				STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	31 12-MAR-8	ANIMAL NUMBER: 317 ($T \odot x \ No$. 344) SEX: F. DAIE OF DEATH: 12-MAR-84 STUDY DAY OF DEATH: 50	EMALE	GROUP: 2 WEEK OF DEATH:	SACRIFICE STATUS: SACRIFICED 8 TERMINAL BODY WEIGHT:	SACRIFICED MORIBUND SODY WEIGHT: 170.00 (GMS)	(GMS)
DATE	A A STUDY OF STUDY	O R G A N W E	E I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14-0CT-85 14-0CT-85	631/91	OVARIES LIVER	0.100		0.0645	0K H1GH	
14-0CT-85 14-0CT-85	631/91	KIDNEYS ADRENAL GLANDS	1.520		0.0258	H GH	
14-001-85	631/91			0.3353 %	0.3677) O	
14-0CT-85 14-0CT-85	631/91 631/91	BRAIN SPLEEN	1.550	0.9118 %	0.2710	UK H1GH	
LIVER		ADHERED-DIAPHRAGM &	& PERITONEUM. PRESENT	INT ADHERED TO STERNAL AREA	AL AREA		
LIVER	16 AT HOLOGI	LIVER ADHERED-DIAPHRAGM & COP COMPANS COP TISSUE / HISTOPATHOLOGIC FINDINGS	R PERITONEUM.	•	, >>> / SPECIAL	COMMENTS	
PARATHYROID .				TISSUE IS MISSING	g		
LIVER	EIGN GRANI	CAPSULAR FOREIGN GRANULOMATOUS REACTION		NOT SPECIFIED (PRESENT)	RESENT)		
KIDNEY	RENAL DISE	EASE		NOT SPECIFIED(TRACE)	ACE)		
JEJUNUM				TISSUE IS MISSING	g		

ELIEKMAN ARMY INSTITUTE OF RESEARCH 1V OF RES SUPP, PATH SERV GP PECIES: RAI/FISCHER-344 STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	
NIMAL NUMBER: 317 (TOX NO. 344) SEX: FEMALE DOSE G ATE OF DEATH: 12-MAR-84 STUDY DAY OF DEATH: 50 STUDY	DOSE GROUP: 2 SACRIFICE STATUS: SACRIFICED MORIBUND STUDY WEEK OF DEATH: 8 TERMINAL BODY WEIGHT: 170.00 (GMS)	Br
SSUE / HISTOPATHOLOGIC FINDINGS	•	own
ONGUE	69 1 TISSUE IS MISSING	696
NON-SUPPURATIVE DERMATITIS	NOT SPECIFIED(TRACE)	
MMARY GLANDS	TISSUE IS MISSING	
ES & OPTIC N. CORNEAL MINERALIZATION CORNEAL VASCULARIZATION CHRONIC KERATITIS	NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE) NOT SPECIFIED(MODERATE)	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	E OF RESEARCH ERV GP	I DA I	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: 14-MAR-86 PAGE: 1 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 335 DATE OF DEATH: 04-JUN-84	335 04-JUN-84	(Tox No. 421) STUDY DAY OF	SEX: FEMALE DOSE DEATH: 134 STUD	DOSE GROUP: 2 SACRI STUDY WEEK OF DEATH: 20	SACRIFICE STATUS: SACRIFICED 20 TERMINAL BODY WEIGHT	MORIBUND 172.00 (
DATE	OAY/WEEK OF STUDY	ORGAN WEI	G H T S S S S S S S S S S S S S S S S S S	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14.0CT-85 14.0CT-85 14.0CT-85	631/91 631/91 631/91	OVARIES LIVER KIDNEYS	0.057 5.602 1.251	0.0331 x 3.2570 x 0.7273 x	0.0337 3.3109 0.7394	
14-0CT-85 14-0CT-85 14-0CT-85	631/91	ADRENAL GLANDS HEART BRAIN	0.056		0.0331 0.3729 1.0000	H1GH OK H1GH
14-001-85	631/91	SPLEEN	0.375		0.2216	нзан
UNITER SOPTIC N		NETWOKDS / PHRASES EMACIATED CRUSTY MATERIAL, PERI CORNEAL OPACITY ADHERED TO DIAPHRAGM.	SEVERITY CRIORBITAL PRESENT PRESENT PRESENT PRESENT	RED LEFT, CENTRALLY ATTACHED IN TWO ATTACHMENT, MIDD TEST COMPOUND	LOCATED, 2 MM AREAS: LEFT LOBE 5 LE: IRREGULAR 15 X	X 8 MM RECTANGULAR 10 MM ATTACHMENT WITH
11SSUE / HISTOPATHOLOGIC FINDINGS	PATHOLOGIC	M 1 C R O S C O P 1	CTISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	/ SPECIAL	COMMENTS
LIVER	EIGN GRANU	-CAPSULAR FOREIGN GRANULOMATOUS REACTION		NOT SPECIFIED (PRESENT)	ESENT)	
RECTUM				TISSUE IS MISSING		
TONGUE	•			TISSUE IS MISSING		
EYES & OPTIC N				:		

CLIEKHAN AKMI INSIIIULE OF RESEARCH 1V OF RES SUPP, PATH SERV GP PECIES: RAT/FISCHER 344	INDIVIOUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	PRINTED: 14-MAR-86 PAGE: 2 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	
NIMAL NUMBER: 335 (TON NO. 421) SEX: FEMI ATE OF DEATH: 04-JUN-84 STUDY DAY OF DEATH: 134	ALE DOSE GROUP: 2 SACRIFICE STATU	SACRIFICED MORIBUND ODY WEIGHT: 172.00 (GMS)	Br
<pre></pre>	IC TISSUE OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	AL COMMENTS	own6
M 00110 M			98

NOT SPECIFIED (TRACE)

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SEH ISCHER-344	OF RESEARCH RV GP		INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	RI STUDY TYPE:	PRINTED: 14.MAR.86 PAGE: 1 PE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 340 (TOX NO. 434) SEX: FEI DATE OF DEATH: 02-0CT-84 SIUDY DAY OF DEATH: 254	340 02-001-84	(Tox No. 45	34) S 0F DEAT	MALE	DOSE GROUP: 2 SACR STUDY WEEK OF DEATH: 37	SACRIFICE STATUS: SACRIFICED MORIBUND DEATH: 37 TERMINAL BODY WEIGHT: 200.	FICED MORIBUND JEIGHT: 200.00 (GMS)
DATE	DAY/WELK OF STUDY	O R G A N ORGAN NAME	WE I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14 - 0CT - 85 14 - 0CT - 85 14 - 0CT - 85	631/91 631/91 631/91	OVARIES LIVER KIDNEYS	,	0.088 7.289 1.414	0.0440 % 3.6445 % 0.7070 %	0.0479 3.9700 0.7702	
14-0CT-85 14-0CT-85	631/91		GLANDS	0.071 0.686 1.836		0.0387 0.3736	H16H OX OX
58 - 130 - 51	631/91	SPLEEN		0.458		0.2495	H1GH
ORGAN NAME	ў	G K O S S O R KEYWORDS / PHRASES	و	AN OBSERV SEVERITY PRESENT	₹		RANDOMLY DISTRIBUTED OVER CORNEA.
		ADHERED TO DIAPHRAG	APHRAGM.	PRESENT	APPROXIMATELY .15 MM FOCAL AREA APPROXIMATELY .VENTRAL MANDIBLE HAS 1 (£ 3	STERNUM
<pre></pre>	** PATHOLOGIC		1 d 0 0	C TISSUE	OBSERVATIONS DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS
LIVER	EIGN GRANUL	LOMATOUS REAC	T 1 0 N		NOT SPECIFIED (PRESENT NOT SPECIFIED(TRACE)	RESENT) Ace)	
PANCREAS	(EXOCRINE) ATROPHY	, , , , , , , , , , , , , , , , , , ,	:		. NOT SPECIFIED(MILD)	[0]	
RECTUM					. TISSUE IS MISSING	_U	

LEINEKMAN AKMT INSTITUTE OF RESEARCH INDIVIDUAL ANIMAL DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	GLP
ANIMAL NUMBER: 340 (TOX NO. 434) SEX: FEMALE DOS DATE OF DEATH: 02-0CT-84 STUDY DAY OF DEATH: 254 STU	DOSE GROUP: 2 SACRIFICE STATUS: SACRIFICED MORIBUND STUDY WEEK OF DEATH: 37 TERMINAL BODY WEIGHT: 200.00 (GMS)
CISSUE / HISTOPATHOLOGIC FINDINGS	PIC TISSUE OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
IAMMARY GLANDS IISSUE IS MISSING	TISSUE IS MISSING
YES & OPTIC N	NOT SPECIFIED (MODERATE)

DIV OF KES SUPP, PAIN SERV OF SPECIES: RAT/FISCHER-344	SCHER-344		STUDY START DATE:	DATE: 23-JAN-84	STUDY T	STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	341 28-JAN-85	ANIMAL NUMBER: 341 (Tox No. 227) S DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEAT	SEX: FEMALE DOSE ATH: 372 STUDY	DOSE GROUP: 3 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 219.	IIM SACRIFICE 2 IEIGHT: 219.00 (GMS)
	A C C C C C C C C C C C C C C C C C C C		G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14-0CT-85	631/91	OVARIES	0.082	0.0374 %	0.0468	0K
14-001-85	631/91	KIDNEYS	1.552	0.7087 %	0.8848	0 K &
	631/91	ADRENAL GLANDS	0.072		0.0410	нісн
14-0CT-85	631/91	HEART	0.782		1 0000	ž
14 - 001 - 85	631/91	SPLEEN	757.0	0.2073 %	0.2588	нлсн
	. •					
EYES & OPTIC N.		CORNEAL OPACITY FOCI	PRESENT		JHITE SPOT. ADJACE 1-2 MM. 1 FOCI MEASURING 2N	LEFT 1MM RAISED WHITE SPOT. ADJACENT White ROUGH AREA ON CORNEA MEASURES 1-2 MM. 2 SLIGHTLY RAISED FOCI MEASURING 2MM ON DIAPHRAGMATIC SURFA CE
<pre></pre>	**************************************	0 S C 0 P I	C 1 5 S U E	OBSERVATIONS DISTRIBUTION (SEVERITY)	>> / SPECIAL	COMMENTS
LIVERFIBROSIS CAPSULAR NO COMPOUND	SULAR NO CC	OMPOUND		NOT SPECIFIED (PRESENT)	(ESENT)	
URINARY BLADDER				TISSUE IS MISSING		
UTERUS	:			:		
-DILATATION OF	THE UTER		•	NOT SPECIFIED (PRESENT)	(ESENT)	

PRINTED: 14-MAR-86 PAGE: 2 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	SACRIFICE 2 GHT: 219.00 (GMS)	IENTS			
DATA REPORT GLP83009	DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 219,00 (0 B S E R V A T 1 O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	TISSUE IS MISSING	NOT SPECIFIED (PRESENT)	NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)
LEFFERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP STUDY NUMBER: SPECIES: RAI/FISCHER-344 STUDY START DATE: 23-JAN-84	ANIMAL NUMBER: 341 (TOX NO. 227) SEX: FEMALE DOSE GR DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372 STUDY W	TISSUE / HISTOPATHOLOGIC FINDINGS	MISSING IS MISSING	PITUITARY GLAND	EYES & OPTIC N
DIV OF SPECIE:	ANIMAL DATE OF	TISSUE	RECTUM	PITUITARY -CYST(S)	EYES & - CORNE - CORNE - CHRON

DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	, PATH SERV SCHER-344	d C b	STUDY START DA	STUDY NUMBER: GLP85009 START DATE: 23-JAN-84	STUDY I	PAGE: 3 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	PAGE: 3 YR CARCINOGENIO
ANIMAL NUMBER: 342 (TOX NO. 233) DATE OF DE'TH: 28-JAN-85 STUDY DAY OF	342 (28-JAN-85	Tox No. 233) SEX: FE STUDY DAY OF DEATH: 372	MALE	DOSE GROUP: 3 SACK STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 210.	RIM SACRIFICE 2 WEIGHT: 210.00	0 (GMS)
•		O R G A N W E I	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	N RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14 · 0CT · 85	631/91	OVARIES	0.121	•	0.0701	. X	
14 · 0CT · 85	631/91	LIVER	5.881		3.4073	1 07	
14 - OCT - 85	631/91	KIDNEYS	1.445		0.8372	XO.	
14 · 0C1 · 85	651/91	ADRENAL GLANDS	0.081	0.0586 %	0.0469	# 15 %	
14.001.85	631/91	S A A A	12.73		1.0000	š	
14-0CT-85	631/91	SPLEEN	0.379		0.2196	нон	
ORGAN NAME	*		GAN OBSEV	S E R V A T I O N S >> SEVERITY GROSS FREE-TEXT	COMMENTS		
WHOLE BODY	JN	NO GROSS LESIONS REC	COGNIZED PRE	PRESENT	· · · · · · · · · · · · · · · · · · ·		
C M I C R C TISSUE / HISTOPATHOLOGIC FINDINGS	ATHOLOGIC F	M I C R O S C O P I	. c T 1 S S U	JE OBSERVATIONS	I O N S >> VERITY) / SPECIAL COMMENTS	COMMENTS	
EXORBITAL LACRIM				TISSUE IS MISSING	91		
THYMUS				TISSUE IS MISSING	9		
LIVER	DUCTULE EPITHELIAL HYPERP	HYPERPLASIA		NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	ACE)		
KIDNEYPROGRESSIVE RENAL DISEASE	ENAL DISEAS	<u> </u>		NOT SPECIFIED(TRACE)	ACE)		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP STUDY NUMBER: GLP83009 SPECIES: RAT/FISCHER-344 STUDY START DATE: 23-JAN-84	
ANIMAL NUMBER: 342 (TOX NO. 233) SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 2 DATE OF DEATH: 28 JAN-85 STUDY DAY OF DEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 210.00 (GMS)	ום
TISSUE / HISTOPATHOLOGIC FINDINGS COPIC TISSUE OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	OMII
RECTUMTISSUE IS MISSING	04
SCIATIC NERVE	
PITUITARY GLAND	

Brown--704

LEFFERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	RV GP	STUDY START DATE: 23-JAN-84	VIDUAL ANIMAL DAIA KEFUKI STUDY NUMBER: GLP83009 TE: 23-JAN-84		PRINTED: 14-MAK-00 PAGE: 5 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	343 28-JAN-85	ANIMAL NUMBER: 343 (TOX NO. 235) SEX: FEI DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	MALE	DOSE GROUP: 3 SACI	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 199.	ZIM SACRIFICE 2 JEIGHT: 199.00 (GMS)
DATE	A C C C C C C C C C C C C C C C C C C C	æ 0	I G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN VEIGHT RATIO	ORGAN STATUS
	631/91	OVARIES	0.172		0.0961	HOIH
14 · 0CT · 85 14 · 0CT · 85	631/91	LIVER	5.425	0.7874 %	3.0307	L 0# 0K
	631/91	ADRENAL GLANDS			0.0581	HIGH
	631/91	HEART	0.728	0.3658 %	0.4067	ОĶ
	631/91	BRAIN	1.790		1.0000	οĶ
14 · 0CI · 85	631/91	SPLEEN	0.450	0.2261 %	0.2514	HIGH
ORGAN NAME	*	G R O S O R KEYWORDS / PHRASES	GAN OBSERVA SEVERITY	A T 1 O N S >> GROSS FREE-TEXT COMMENTS	COMMENTS	
WHOLE BODY		NO GROSS LESIONS RE	ECOGNIZED PRESENT			
C TISSUE / HISTOPATHOLOGIC FINDIN	** **	<pre></pre>	IC TISSUE	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	I O N S >> VERITY) / SPECIAL COMMENTS	COMMENTS
LIVERBILE DUCTULE EPITHELIAL HYPERPLASIA	EPITHELIA	DUCTULE EPITHELIAL HYPERPLASIA		NOT SPECIFIED(TRACE)	(ACE)	
URINARY BLADDER				TISSUE IS MISSING	91	
LEUM				TISSUE IS MISSING	91	
SCIATIC MERVE				TISSUE IS MISSING	9	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAI/FISCHER-344
ANIMAL NUMBER: 344 (TOX NO. 240) SEX: FEMALE DATE OF DEATH: 04.DEC.84 STUDY DAY OF DEATH: 317
ORGAN WEIGHTS >> ABSOLUTE ORGAN ORGAN NAME WEIGHT (GMS)
OVARIES LIVER TIONEYS
ADRENAL GLANDS 1.831 HEART 2.835 BRAIN 3.552
SPLEEN S G R O S S O R G A N KEYWORDS / PHRASES
MESENTARY CONGESTED / RED PALE AND / OR TAN COLOR ROUNDED EDGES PROMINENT LOBULAR MARKINGS FOCI
ENLARGED (SPLENOMEGALY)
C N C C O P I C T I TISSUE / HISTOPATHOLOGIC FINDINGS

SPLEEN

NOT SPECIFIED(MARKED)

INDIVIDUAL ANIMAL DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344 SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84 STUDY TYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: 344 (TOX NO. 240) SEX: FEMALE D DATE OF DEATH: 04-DEC-84 STUDY DAY OF DEATH: 317 S	SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SACRIFICED MORIBUND TH: 317 STUDY WEEK OF DEATH: 46 TERMINAL BODY WEIGHT: 170 OD CEMEN
C M I C R O S C O P I C T I S S U E TISSUE / HISTOPATHOLOGIC FINDINGS	C T I S S U E O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS
SPLEEN	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITC P, PATH ISCHER-3	ITE OF RESEARCH Serv GP 144	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: 14-MAR-86 PAGE: 8 STUDY TYPE: CHRONIC/2 YR CARCINGENIC	
ANIMAL NUMBER: DATE OF DEATH:	3 13-DEC-	ANIMAL NUMBER: 345 (TOX NO. 242) SEX DATE OF DEATH: 13-DEC-84 STUDY DAY OF DEATH:	FEMALE 326	DOSE GROUP: 3 SACRI STUDY WEEK OF DEATH: 47	SACRIFICE STATUS: SACRIFICED MORIBUND 47 TERMINAL BODY WEIGHT: 199.	1CED MORIBUND 1GHT: 199.00 (GMS)	Br
DATE	<pre></pre>	K ORGAN WELG	H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	own7
	631/91	OVARIES	0.078	0.0392	0.0427	 0K	80
	631/91	KIDNETS	2.122	1.0663 %	4.0033	Ö Ö	
12 - NOV - 85	651/91	ADRENAL GLANDS	0.059	0.0296 %	0.0323	#10#	
14-001-85	631/91	88.41	1 825	0.3487 %	0.3803	000	
14 - 0CT - 85	631/91	SPLEEN	0.447		0.2449	0K H1GH	
ORGAN NAME		G R O S S O R G A XEYWORDS / PHRASES	AN OBSERVA SEVERITY	T I O N S >> GROSS FREE TEXT COMMENTS	IMMENTS		
PERITONEAL CAV.		LARGE INTESTINE	PRESENT	OUTER SURFACE HAS	OUTER SURFACE HAS 2 RED FOCI .5 X .5 CM AND 2	CH AND 2 X 2 HM	
TISSUE / HISTOP,	ATHOLOGI	<pre></pre>	C 1155UE	O B S E R V A T I	O B S E R V A T I O N S >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS	AMENIS	
LIVER	EPITHELI	DUCTULE EPITHELIAL HYPERPLASIA		NOT SPECIFIED(TRACE)	E)		
PROGRESSIVE RENAL DISEASE	ENAL DIS	EASE		NOT SPECIFIED(MILD)			

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER·344	INSTITUTE P, PATH SE! ISCHER·344	OF RESEARCH RV GP	INDIVIDU STUDY START DATE:	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: PAGE: STUDY TYPE: CHRONIC/2 YR CA	14 MAR-80 2 9 CARCINOGENIC
ANIMAL NUMBER: 346 DATE OF DEATH: 28-JAN-85	R: 346 H: 28-JAN-85	(Tox No. 243) STUDY DAY OF D	SEX: FEMALE DOS EATH: 372 STU	DOSE GROUP: 3 SAC STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 54 TERMINAL BODY WEIGHT: 243	2 .00	(GMS)
DATE	A STUDY	O R G A N W E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14-0CT-85	631/91	OVARIES	0.190	0.0782 %	0.1096	н16н	
14 - 0CT - 85	631/91	KIDNEYS	1.680	0.6914 %	0.9689	ok S	
14.0CT-85	631/91	ADRENAL GLANDS	0.136		0.0784	HIGH	
14.0CT-85	631/91	HEART	0.773	0.3181 %	1,0000	X 0	
14 - 0CT - 85	631/91	SPLEEN	0.472		0.2722	HIGH	
ORGAN NAME	¥	G R O S S O R G KEYWORDS / PHRASES	AR OBSERV SEVERITY	V A T I O N S >> ITY GROSS FREE-TEXT COMMENTS	COMMENTS		
EYES & OPTIC N.		CORNEAL OPACITY	PRESENT		RIGHT; SMALL PUNCTATE OPACITIES		
TISSUE / HISTOR	** ** **	<pre></pre>	C TISSUE	OBSERVATIONS	>> / SPECIAL	СОММЕНТЅ	
E SOPHAGUS				TISSUE IS MISSING	9+		
AORTA				TISSUE IS MISSING	91		
THYMUS				TISSUE IS MISSING	91		
LIVER	EPITHELIAL	HYPERPLASIA		NOT SPECIFIED(TRACE)	(ACE)		
SKELETAL MUSCLE				TISSUE IS MISSING	9		

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LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	PRINTED: 14-MAR-86 PAGE: 10	
ANIMAL NUMBER: 346 (TOX NO. 243) SEX: FEM. DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 2 DEATH: 372 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 243.00 (GMS)	CMS)	Bi
COPI	COPIC TISSUE / HISTOPATHOLOGIC FINDINGS OBSERVATIONS >> DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS		COWIN
SCIATIC NERVE	SNISSIM SI BOSSIL		110

LEITERMAN AKMT INSTITUTE UF KESEAKCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P. PATH SEI ISCHER-344	UP KESEAKCH RV GP	INDIVIDUAL ANIMAL STUDY START DATE: 23-JAN-84	INDIVIDUAL ANTHAL DATA KEPUKI STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: PAGE: STUDY TYPE: CHRONIC/2 YR C/	CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	347 28-JAN-85	ANIMAL NUMBER: 347 (Tox No. 245) SEX: FEI DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH: 372	AALE	DOSE GROUP: 3 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 212.	RIM SACRIFICE 2 WEIGHT: 212.00	(GMS)
DATE	A < C C C C C C C C C C C C C C C C C C	O R G A N L E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	
14-0CT-85 14-0CT-85	631/91	OVARIES LIVER	0.108		0.0635	8 8	
14-0CT-85 14-0CT-85	631/91	KIDNEYS ADDENAL GLANDS	1.532	0.7226 % 0.0325 %	0.9006	N OK	
14 · 0CT · 85	631/91		0.786		0.4621	90 K	
14-001-85	631/91	SPLEEN	967.0	0.2340 %	0.2916	нон	
EYES & OPTIC N		OCCULAR DISCHARGE	PRESENT		BILATAERAL RED DISCOLORATION AROUND EYES	D EYES	
C M I C R C A I STOPATHOLOGIC FINDINGS	<pre></pre>	M I C R O S C O P I FINDINGS	C 1 1 S S U E	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	/ SPECIAL	COMMENTS	
PARATHYROID .				TISSUE IS MISSING	12		
HEART	, , , , , , , , , , , , , , , , , , ,	ОМТОРАТНТ		NOT SPECIFIED(TRACE)	(35)		
THYMUS				TISSUE IS MISSING	, -		
LIVER	EPITHELIA	DUCTULE EPITHELIAL HYPERPLASIA 1718		NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	(CE)		

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SE ISCHER-344	OF RESEARCH RV GP	INDIVIDUAL ANIMAL STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: 14-MAR-86 PAGE: 13 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 348 DATE OF DEATH: 28-JAN-85	348 28-JAN-85	348 (Tox No. 248) SEX: FEI 1-85 STUDY DAY OF DEATH: 372	HALE	DOSE GROUP: 3 SACRIFICE STATUS: INTERIM SACRIFICE 2 STUDY WEEK OF DEATH: 54 TERMINAL BODY WEIGHT: 194.0	FICE STATUS: INTER	IM SACRIFICE 2 IFIGHT: 194.00 (GMS)
DATE	CC DAY/WEEK OF STUDY	ORGAN WE	GHTS >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14.0CT.85 14.0CT.85	631/91	OVARIES	0.071	0.0366 %	0.0398	 0K
14-001-85	631/91	KIDNEYS	1.479	0.7624 %	5.1299	LOW
14.0CT-85	631/91	ADRENAL GLANDS	0.078		0.0437	10 H
14.0CI-85	651/91	HEART	0.803		9677.0	0K
14 · 0C1 · 85	631/91	SPLEEN	1.786	0.9206 % 0.2196 %	1.0000 0.2385	HIGH HIGH
ORGAN NAME	: * : *	G R O S S O R G KEYWORDS / PHRASES	AN OBSERVA	A T I O N S >>		
WHOLE BODY	-	NO GROSS LESTONS REC	OGNIZED		2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	
TISSUE / HISTOPATHOLOGIC FINDINGS	**************************************	M I C R O S C O P I FINDINGS	2 1 1 3	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	O N S >> ERITY) / SPECIAL COMMENTS	OMMENTS
THYMUS				. TISSUE IS MISSING		
LIVER	EPITHELIAL	DUCTULE EPITHELIAL HYPERPLASIA		. NOT SPECIFIED(MODERATE)	RATE)	
KIDNEY	ENAL DISEA	SE		NOT SPECIFIED (TRACE)	ú	

DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	UPP, PATH SEI /FISCHER-344	RV GP	STUDY START DATE:	STUDY NUMBER: GLP83009 T DATE: 23-JAN-84	, , , , ,	PAGE: 14 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC	14 ARCINOGENI
ANIMAL NUMBER: DATE OF DEATH:	349 28-JAN-85	ANIMAL NUMBER: 349 (TOX NO. 252) S DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEAT	SEX: FEMALE DOSE TH: 372 STUD	DOSE GROUP: 3 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SAC 54 TERMINAL BODY WEIGHT:	RIM SACRIFICE 2 JEIGHT: 209.00 (GMS)	GMS)
DATE	A C C C C C C C C C C C C C C C C C C C	O R G A N W E I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN	· · · · · · · · · · · · · · · · · · ·
14-0CT-85 14-0CT-85	631/91	OVARIES LIVER	0.108		0.0632	10N 0K	
14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85 14 · 0CT · 85	631/91 631/91 631/91 631/91	KIDNEYS ADRENAL GLANDS HEAR? RPAIN	1.452 0.073 0.807	0.6947 % 0.0349 % 0.3861 %	0.8496 0.9427 0.4722 1.0000	76 F 96	
14 · 0CT · 85	631/91	SPLEEN	697.0	0.2244 %	0.2744	H51H	
		NEIMONDS / THRASES			:		
UTERUS HYDROMETRA	**	HYDROMETRA H I C R O S C O P I FINDINGS	PRESENT C T I S S U E	DIFFUSE ENLAR O B S E R V A DISTRIBUTION	GEMENT, TWICE THE SIZE OF NOR TIONS >> (SEVERITY) / SPECIAL COMMENTS	OF NORMAL	
EXORBITAL LACRIM				TISSUE IS MISSING			
THYMUS				TISSUE IS MISSING			
LIVER	EPITHELIA!	PITHELIAL HYPERPLASIA		NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE) NOT SPECIFIED(MILD) NOT SPECIFIED(MILD)	ce)		
UTERUS		TERUS		TO SOCIETED CODECENTY	, H		

INDIVIDUAL ANIMAL DATA STUDY NUMBER: GLP8: START DATE: 23-JAN-84
EATH: 372 STUDY W
TISSUE / HISTOPATHOLOGIC FINDINGS DISTRIBUTION (SEVERITY) / SPECIAL COMMENTS TO SERVATION (SEVERITY) / SPECIAL COMMENTS
COLON
STOMACH TISSUE IS MISSING

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUT: P, PATH SI ISCHER-34	E OF RESEARCH ERV GP 4	IN STUDY START	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 STUDY START DATE: 23-JAN-84	IRT STUDY I	PRINTED: 14-MAR-86 PAGE: 16 STUDY TYPE: CHRONIC/2 YR CARCINGENIC
ANIMAL NUMBER: DATE OF DEATH:	35 30-MAR-8	(Tox No. 253) STUDY DAY OF DE/	SEX: FEMALE	DOSE GROUP: 3 SACRIFICE STATUS: SACRIFICED MORIBUND STUDY WEEK OF DEATH: 10 TERMINAL BODY WEIGHT: 159.0	IFICE STATUS: SACR	IFICED MORIBUND WEIGHT: 159.00 (GMS)
DATE	OAY/WEEK OF STUDY	O R G A N W E I	G H T S >> I G H T S >> WEIGHT (GMS)	AN RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
14-001-85	631/91	OVARIES	680.0	0.0560 %	0.0541	* 6
14-001-85	631/91	LIVER	5.085	3.1881.8 0.7509.8	0.7263	Šŏ
14-001-85	631/91	ADRENAL GLANDS	0.049	0.0308 %	0.0298	HIGH
14-001-85	631/91	HEART	0.571		1 0000	10 F
14 · OCT · 85 14 · OCT · 85	631/91 631/91	BRAIN SPLEEN	1.644	0.2516 %	0.2433	F.91.H
ORGAN NAME	*	G R O S S O R (S B O N W D S	S E R V A T I O N S >> SEVERITY GROSS FREE-TEXT COMMENTS	COMMENTS	
EYES & OPTIC N		CONJUNCTIVITIS	· a.	PRESENT BILATERAL. RIGHT	BILATERAL. RIGHT EYE VASCULARIZATION OF THE CORNEA	ON OF THE CORNEA
TISSUE / HISTO	PATHOLOGI	<pre></pre>	8 8 1 1 0 1	SUE OBSERVATIONS SUE DISTRIBUTION (SEVERITY)		>>> SPECIAL COMMENTS
URINARY BLADDER	æ			TISSUE IS MISSING	97	
RECTUM				TISSUE IS MISSING	9	
MAMMARY GLANDS				TISSUE IS MISSING	97	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER·344	INSTITUTI P, PATH SI ISCHER-34	E OF RESEARCH ERV GP	INDIVIDUAL ANIMAL STUDY NUMBER: STUDY START DATE: 23-JAN-84	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: 14-MAR-86 PAGE: 1 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: 352 DATE OF DEATH: 28-JAN-85	35. 28-JAN-8	(Tox No. 255) Study DAY OF DEA	MALE	DOSE GROUP: 3 SACRI STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 204.0	AIM SACRIFICE 2 AEIGHT: 204.00 (GMS)
DATE	DAY/WEEK OF STUDY	O R G A N W E I O ORGAN NAME	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BOD, WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN
14.001.85	631/91	OVARIES LIVER	0.135	2.5176 %	0.0751	#01 #01
14 · 0C1 · 85 14 · 0C1 · 85 14 · 0C1 · 85	631/91	KIDNEYS ADRENAL GLANDS HEART	1.482 0.058 0.662	0.7265 % 0.0284 % 0.3245 %	0.0824 0.0323 0.3684	11 GH 0K
14 - 0CT - 85 14 - 0CT - 85	631/91	BRAIN	1.797		1.0000 0.2276	0K H1GH
ORGAN NAME	*	GROSS ORGINETANNES	AN OBSERVI	S E R V A T I O N S >> SEVERITY GROSS FREE-TEXT COMMENTS	OMMENTS	
UTERUS		THICKEN	PRESENT	-		
* M I C R I		0 8 0 0 P 1	C 1 1 S S U E	O B S E R V A T I O N S DISTRIBUTION (SEVERITY)	ONS >> ERITY) / SPECIAL COMMENTS	COMMENTS
UTERUS	F THE UTE	TERUS		NOT SPECIFIED (PRESENT)	ESENT)	

LETTERMAN ARMY INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	INSTITUTE P, PATH SEI ISCHER-344	OF RESEARCH RV GP	INDI STUDY START DA	INDIVIDUAL ANIMAL DATA REPORT STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PRINTED: 14- PAGE: 2 STUDY TYPE: CHRONIC/2 YR CARCI	1: 14-MAR-86 1: 2 CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	353 28-JAN-85	ANIMAL NUMBER: 353 (TOX NO. 261) SEX DATE OF DEATH: 28-JAN-85 STUDY DAY OF DEATH:	FEMALE 372	DOSE GROUP: 3 SAC STUDY WEEK OF DEATH: 54	RIFICE STATU	STATUS: INTERIM SACRIFICE 2 RMINAL BODY WEIGHT: 205.00 (GMS)	Br
DATE	OAY/WEEK OF STUDY	O R G A N W W	WEIGHTS SYABSOLUTE ORGAN	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS	own7
14-0CT-85 14-0CT-85 14-0CT-85	631/91	OVARIES LIVER KIDNEVS	0.103	0.0502 % 2.7634 %	0.0568	MO N	'18
14-0CT-85 14-0CT-85 14-0CT-85	631/91 631/91 631/91	ADRENAL GLANDS HEART BRAIN		0.127 % 0.0273 % 0.3029 % 0.8839 %	0.8063 0.0309 0.3427 1.0000	#16# 00 00 00	
14-0CT-85	:	SPLEEN	:	4	0.2765	H0H	4 • • •
ORGAN NAME	× ,	G R O S S O R G KEYWORDS / PHRASES	A 14 O B	S E R V A T I O N S >> SEVERITY GROSS FREE-TEXT	COMMENTS		
EYES & OPTIC N		IRREGULAR EYE SURFACE.		ENT RIGHT CORNEA			
SSUE / HISTON	PATHOLOGIC	<pre></pre>	PIC TISSU	E OBSERVATION DISTRIBUTION (SEVERITY	S >>	COMMENTS	· · · · · · · · · · · · · · · · · · ·
HEART	HY			NOT SPECIFIED(TRACE)	ACE)		
LIVERBILE DUCTULE EPITHELIAL HYPERPLASIA	EPITHELIAL H	HYPERPLASIA		NOT SPECIFIED(TRACE) NOT SPECIFIED(TRACE)	ACE)		
PROGRESSIVE RENAL DISEASE	ZENAL DISEA	DISEASE		NOI SPECIFIED(TRACE)	ACE)		

LEFFERMAN ARMT INSTITUTE OF RESEARCH DIV OF RES SUPP, PATH SERV GP SPECIES: RAT/FISCHER-344	PATH SE	or Assesses	STUDY START DATE: 23-JAN-84	STUDY NUMBER: GLP83009 T DATE: 23-JAN-84		PAGE: 3 STUDY TYPE: CHRONIC/2 YR CARCINOGENIC
ANIMAL NUMBER: DATE OF DEATH:	354 28-JAN-85	64) 7 OF DEA	: FEMALE 372	DOSE GROUP: 3 SACRIF STUDY WEEK OF DEATH: 54	SACRIFICE STATUS: INTERIM SACRIFICE 2 54 TERMINAL BODY WEIGHT: 197.	IM SACRIFICE 2 EIGHT: 197.00 (GMS)
DATE	OAY/WEEK	ORGAN WE I	G H T S >> ABSOLUTE ORGAN WEIGHT (GMS)	RELATIVE % OF BODY WEIGHT	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
14-0CT-85	631/91	OVARIES	0.087		0.0493	0K
14.0CT.85	631/91	LIVER	1,512	0.7675 %	0.8562	ס ר צ
14-001-85	631/91	ADRENAL GLANDS	0.073		0.0413	HIGH
14-0CT-85	631/91	HEART	0.708		0.4009	, 0 , 0 , 0
14 · 0CT · 85 14 · 0CT · 85	631/91	BRAIN SPLEEN	1.766	0.2675 %	0.2984	H1GH
ORGAN NAME	*	G R O S S O R G KEYWORDS / PHRASES	AN OBSERVI	A T I O N S >> GROSS FREE TEXT	COMMENTS	
WHOLE BODY		NO GROSS LESIONS RECO	COGNIZED PRESENT			
C R C M J C R C C M J C R C C M J C R C C C C C C C C C C C C C C C C C	>> 0PATHOLOGIC	M 1 C R O S C O P 1 FINDINGS	C 1 1 % S U E	OBSERVATIONS DISTRIBUTION (SEVERITY)	, SPECIAL	COMMENTS
MAMMARY GLANDS	· · · · · · · · · · · · · · · · · · ·			TISSUE IS MISSING		
PITUITARY GLAND -CYST(S)	QN			NOT SPECIFIED (PRESENT)	ESENT)	
EYES & OPTIC N	N			NOT SPECIFIED(TRACE)	CE)	

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